

The Future of Truth and Freedom in the Global Village

**Modernism and the Challenges of
the Twenty-first Century**

THOMAS R. MCFAUL



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of the Twenty-first Century*

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This book is dedicated to my brothers, Dean, Jim, and Richard,
and to the memory of our sister, Nancy.

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Preface

This book is written for everyone who loves the Truth and the Freedom to live by it. Hopefully, this means you, the reader. At first glance, it might seem impossible even to know the Truth given the wide range of truths that the earth's diverse communities espouse. However, it is not. As will be demonstrated in the 10 chapters that follow, there is a Truth to the way things work best in the world. It is the primary purpose of this book to identify this, because surviving in the future depends on it. Above all else, three questions guide the search for the Truth: What can be learned from the past? What can be said about the present? And what is likely to occur in the future?

This book is the second of a trilogy of books that the author is writing about the future. It is meant as a complementary volume to the first, which is titled, *The Future of Peace and Justice in the Global Village: The Role of World Religions in the Twenty-first Century* (Westport, CT: Praeger, 2006). The author is currently writing the third book of the trilogy, *The Future of Religion in the Global Village*, which is scheduled for completion in the near future.

Several assumptions guide the writing of this book. First, since the dawn of civilization many millennia ago, humans have been experimenting through trial and error with how to best organize their societies. Some approaches have succeeded while others have failed miserably. Much can be learned from both the successes and the failures. The successes planted the seeds of long-term survival, and the failures faded into oblivion. Some were rigid and lasted for a limited period of time. Then they disappeared. Others were flexible and underwent transformations that enabled them to become self-sustaining.

In other words, there is a historical, real world and empirical basis for concluding that some ways of organizing society are better than others when it comes to surviving, indeed, thriving, in both the short and long run. This does not mean that everyone agrees that there is only one best way to do things. The contrary is true. In the emerging global village of the 21st century and beyond, there will be much competition, and in some cases open conflict, over the preferred pathways that societies ought to follow as the future unfolds. Some societies will do it better than others because they have been more successful at discovering and living by the Truth, especially when they have the Freedom to pursue it and choose to live by it. As a result, they will prevail.

In addition, all societies operate on at least two levels. The first involves society as a whole. Every society is comprised of multiple layers of complexity that involve the interaction of many internal subdivisions such as the economy, the government, culture, norms, values, religion, and knowledge, among others. If it is to sustain itself over time, it must tie together these separate pieces into a seamless tapestry. It must reduce or eliminate serious friction points that could undermine its long-term potential for survival. In the final analysis, every society's long-term viability rests on how completely it can become integrated from top to bottom—that is, how well individuals at the micro level join in common support for the larger structures that exist at the macro levels of culture, the economy, and the political system.

Second, every society's potential for insuring its longevity depends on its ability to manage social change successfully. This sounds simple, but in reality it is not. To even the most casual observer of the past several thousands of years of human history, nothing has remained stagnant. This means that in the long course of social evolution, to stay unchanged is to fall behind. Those societies that have tried to sit on the status quo have found themselves swept away by those who have ridden the wave of change into the future. The essential Truth of this is undeniable and captured well by the saying, "Either adapt or die." It is an old story—in nature as well as society.

The 10 chapters that comprise this book are easy to follow, and they progress in a logical manner from one topic to another. The first chapter defines the two major concepts that the book examines: Truth and Freedom. This is an essential task because both words have multiple meanings and are subject to a variety of interpretations depending on how different authors use them. For example, theologians who write about inner spiritual Truth or Freedom treat these concepts differently than public officials who interpret these two terms from the perspective of public political and individual rights. In other settings, scientists pursue their quest to discover the Truth about nature under the assumption that they have the Freedom of inquiry to do so. In each of these examples, Truth and Freedom have different meanings and applications depending on the context in

which they are used. Thus, it is necessary from the outset in chapter 1 to define how Truth and Freedom will be used throughout the remainder of this book.

Chapter 2 focuses on major historical transformations that have occurred over time. In particular, it examines the differences that exist between three distinct stages of social evolution: Premodern, Modern, and Postmodern. Many current commentators classify the combined changes that have occurred during the past several centuries according to these three broad frameworks. All three will be described in detail with two specific questions in mind. Which ones best describe from an *empirical* point of view the actual pathway that social change has followed during the past several centuries? And which one is most likely to exert the greatest influence on the future of the emerging global village? Chapter 2 will answer both of these questions.

Chapter 3 looks at social change from the perspective of the outer boundaries within which the future will unfold. As will be demonstrated, change always occurs within margins, or polarities, that are set by the human condition. In particular, four such polarities will be discussed in-depth: free will-determinism, material-spiritual, good-evil, and individual-society. In a very real sense, the first three chapters provide the foundation for the development of the next six chapters, which focus on specific issues. Building on the definitions of Truth and Freedom that appear in chapter 1, chapter 2 spotlights past and present trends, especially modernization. This in turn leads to chapter 3, which describes the outer boundaries and tensions that will bracket the direction of future social change.

Chapters 4 and 5 concentrate on the contributions of science. It is a principal contention of this book that science has been one of the main engines of social change during the past several centuries and that it will continue to drive important developments in the 21st century and beyond. Both chapters examine how past and present scientific discoveries about nature have affected perceptions of Freedom and how further discoveries will most likely influence how this issue will be viewed in the future. Chapter 4 deals with the findings of the physical sciences, and chapter 5 examines the connection between the brain and the mind.

Chapter 6 moves in an entirely different direction: away from the hard sciences and toward the soft-core side of human spirituality. At first glance, these two appear to sit at opposite ends of the Truth and Freedom spectrum. However, they do not. Instead, they are very closely connected. Since the rise of the Modern world, one of the most widely discussed, as well as hotly debated, topics has been the relationship between science and religion. Of special significance are the different views of whether a spiritual reality of any kind lies hidden beneath the surface of the physical universe; and if so, how it can be known. Chapter 6 explores this topic in detail and ties it directly to the religious diversity that is spreading throughout the global village.

Given the variations that exist between and within the world's great spiritual communities, chapter 7 pushes to the next level of questioning by asking whether there exist universally shared values that transcend separate faith boundaries. However, unlike chapter 6, which focuses exclusively on human religiosity, chapter 7 includes major philosophical traditions as well. Whereas the world religions couple their views about human values with some form of spirituality, philosophical approaches rely almost exclusively on reason to discover the ethical ideas that people everywhere in the emerging global village share.

Chapters 8 and 9 shift the discussion from high-soaring spiritual and ethical ideals to two of the most down-to-earth human concerns: economics and politics. In the area of economic development, chapter 8 looks at real-world trends that have developed during the past two centuries. It is the specific goal of this chapter to track the patterns of change of different economic systems and to show empirically and comparatively why one type in particular—the government-regulated marketplace—has thus far demonstrated its superiority over all others at enhancing humanity's economic well-being.

Chapter 9 focuses on the dominant political trend that has emerged around the world in the past 200 years. While there are exceptions, like changes in the economic arena, the political transformations that have taken place in the Modern world have gone mainly in one direction—toward democracy. This chapter will examine how this happened, whose ideas contributed the most to its development, and where worldwide democracy might be headed throughout the remainder of the 21st century and beyond.

The last chapter of the book, chapter 10, forecasts scenarios of the future. It uses this approach to envision alternative pathways the future might follow—depending on decisions that are made in the present, as well as on an ongoing basis as the future unfolds. All of the scenarios in this chapter integrate the major themes presented in the previous nine chapters. These include the continuation of the modernization process, the impact of science and technology, the role of the world's diverse religions, the potential of people everywhere to embrace universal values, and developments that could occur in both economics and politics.

Finally, it is one of the author's major assumptions that the future is not predetermined. Instead, it is developmentally open, which means that human choices, along with many unexpected and unplanned surprises, will play a major role in determining the future. At the end of chapter 10, three alternative scenarios of the future in the year 2050 will be developed, and a judgment will be presented regarding which is most preferred as well as most likely to occur.

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After nearly 40 years of college teaching, I have learned that some of my best teachers have been my students. Their tough questions and constructive suggestions have withstood the test of time and in no small way helped shape many of the ideas that appear throughout this book. Lastly, special thanks go to my family for their continuous encouragement. Their loving support knows no end. If any shortcomings appear in the following pages, they rest entirely on my shoulders.

CHAPTER 1

At the Starting Line

You shall know the Truth and the Truth shall set you free. Without Freedom, it is impossible to know the Truth.

The entire sweep of human history, past, present, and future, can be condensed into one overarching and universal goal: the quest for Truth. This one impulse, more than any other, cuts through the cloth of constant change that has existed on the earth since the dawn of human civilization thousands of years ago. Despite the intense competition that presently prevails among the devout followers of diverse religious and cultural groups to capture the hearts and minds of citizens in the emerging global village of the 21st century, all are driven by one basic desire: to know the Truth and to live by it.

Given the diverse ways in which cultures around the world perceive reality, such a statement about the main aim of people everywhere might seem at best too simplistic or at worst downright false. Nonetheless, the major contention of this book can be stated in simple terms: past societies that have contributed the most to understanding and living by the Truth have prevailed over those that have not. Therefore, by implication, those societies that keep contributing to a deeper understanding of the Truth will exert the greatest influence in shaping the future of the 21st century and beyond.

All societies around the world are engaged in intense competition to show how their ways of organizing political, economic, and social life are superior to those of others. In the give and take of this competition, those societies that have a more profound grasp of the Truth will ultimately succeed over those that do not. In short, the Truth will “out” and those societies

that live by it will possess the highest potential for long-term survival and adaptability to social change.

TRUTH

Defining the word Truth is the proper point of departure for such a bold assertion. What is Truth? In simple terms, Truth is reality; and to live by the Truth is to live according to reality as it actually exists and not as it is imagined to exist. While this definition is easy to grasp, discovering and living by the Truth is anything but simple. On the contrary, it is extremely complex, as the competition among adherents of diverse views of reality confirms. Finding Truth amidst the discordant voices that claim to possess it is a challenge of the highest order, just as apprehending it correctly is no trivial matter. The reason is simple: the future of humankind depends on getting it right.

The starting line for the quest for Truth is found in the human condition. While evolution on earth has provided human beings with unique mental capacities, like all other species, humans are finite creatures who inhabit an extraordinarily complex universe. In large measure, over millions of years of natural evolution, nonhuman species have settled into their biological niches through superior adaptations based on instinct.

While humans, like all biological beings, cannot live apart from their bodies, human adaptation and survival has taken a different route. It comes through culture. Even though much human behavior is prompted by the same innate instincts that stimulate nonhumans, such as the need for food, water, shelter, reproduction, and self-preservation, among others, humans are distinct by virtue of having developed higher brain functions that make possible living by sophisticated, symbol-based language systems without which humans would not have carved out their own unique place amidst the amazing diversity of earthly creatures.

While all species have developed effective ways to communicate and some have demonstrated rudimentary problem-solving skills, only humans contemplate their own existence and search for meaning through self-consciously chosen images and goals. Worms and whales do not ask why they are here. Nor do any other species. Only people do. Seeking an answer to this question is the essence of the human search for Truth. Only humans think about the origin and destiny of the universe and of their place in it. This means that, from a global perspective, all of the earth's diverse philosophies and religions collectively comprise different answers to the "big questions" of life, because individuals contemplate them in every culture—without exception.

In addition, in the ongoing quest for Truth, every society has developed and continues to develop a storehouse of knowledge that it uses to survive and adapt to changing circumstances. All societies seek to answer

not only the theoretical question of “why,” but also the practical concern of “how.” Just as every culture evolves a religious or philosophical view that explains the origin and destiny of the cosmos and the place of people within it, each one also must develop useful knowledge on how to sustain and protect itself in the physical and social worlds that it depends upon for survival.

Metaphorically speaking, in the search for Truth, every society must not only keep its “head in the clouds” but also its “feet on the ground.” In order to carry on generation after generation, every society must construct a vision of reality and integrate it from top to bottom—that is, it must form abstract ideas that provide personal meaning to practical techniques that satisfy nutritional, medical, military, communication, transportation, housing, and other biological and social needs.

During the course of the earth’s long evolution, humanity emerged as a finite and fragile species trying to make sense out of an extraordinarily complex universe not of its own creation, seeking to adapt and survive in the process. The bookends of every human life begin with birth and end with death, which can occur at any moment without warning or apparent purpose. Vulnerability to life’s capricious forces affects everyone and every society at every turn. As individuals search for meaning, group solidarity provides protection against outside dangers and serves as the foundation for satisfying basic survival needs.

Gradually, the basic human survival tool became the “big brain,” which enabled the development of complex problem-solving skills that contributed to rapid evolutionary adaptations. Because communities evolved in isolation of one another, they created distinct languages that bound them together and separated them from each other. As a result, human evolution produced a broad range of human cultures that possess distinctive histories and views of Truth that enable them to respond creatively to humanity’s basic condition of finitude and vulnerability.

As the study of history shows, many societies have come and gone during the long course of human evolution. The once mighty Egyptian, Greek, and Roman Empires no longer exist. The same can be said for the Aztec Empire, Zhou China, Great Zimbabwe, the Ottoman Empire, the Third Reich, the Soviet Union, and scores more.¹ Over the long haul of history, some combinations of theoretical and practical knowledge have worked, and continue to work, better than others in terms of self-perpetuation. Simply stated, in the harsh game of human survival, some cultures have out-competed others. The reason is simple: they have learned how to survive better based on a superior view of reality, that is, of Truth.

At this point, two other issues are closely connected to the quest for Truth. The first consists of deeper reflection on the concept of Truth itself. The second involves how human groups view the status of the mental images, that is, the concepts of reality, that they construct out of their quest for the Truth in order to increase the chance of their short- and long-term continuation.

To survive and prosper, every culture must create a sustainable world-view or mental framework that interprets and integrates diverse experiences. Inevitably, this involves consideration of alternative interpretations of what well-known American philosopher William James called the “buzzin’ bloomin’ confusion” of life.² From the moment of birth, both the self and society are barraged by complex stimuli—both internal and external. As a result of the brain’s evolution, cultures have discovered how the world works and have identified the complex patterns that operate in both nature and human behavior. Nothing short of human survival depends on getting this right. Any society that misjudges at this most basic level puts at risk its potential for long-term survival, especially in relationship to competing groups.

The struggle to survive occurs amidst the recognition that the human mind is limited in its capacity to internalize and assimilate the immense (and possibly even infinite) number of stimuli that constantly bombard the self and society from all directions—360 degrees. Despite this limitation, thus far human cultures have persevered because of the brain’s ability to absorb stimuli that are mediated through the five senses (sight, smell, hearing, taste, and touch) and to convert mental impressions into sustainable knowledge. In effect, the brain draws selectively from the world’s buzzin’ bloomin’ confusion and transforms various experiences into meaningful views of reality.

At the same time, given the diversity of worldviews that exists both within and across cultures, it is clear that people in all regions of the world hold a variety of beliefs about the nature of reality. Or stated simply, when it comes to Truth, the emerging global village can be characterized best by one word: pluralism.

FREEDOM

How does Freedom connect to humanity’s quest to discover and live by the Truth? How should it be defined? At the most fundamental level, Freedom consists of the ability of individuals and societies to exercise control over their destinies. This sounds simple, but in practice, like discovering the Truth, it is not. This is so because any person’s or group’s ability to make decisions and implement actions that follow from them operates within conditions that impose relative degrees of constraint. The exercise of Freedom is always more or less limited by numerous internal and external factors. The expressions of Freedom are never nonhistorical in the sense that they exist as pure forms apart from the specific opportunities and limitations that are tied to them. Nor are they ever perfect as utopian manifestations of the human desires that inspire them.

In addition, the human need for Freedom is two-sided. On the one hand, as indicated above, Freedom involves the ability of any person or group to

make choices and initiate actions. On the other hand, in order to do so, the decisions and activities that result from the expression of Freedom require protection against any potential harm that could arise in response to them. In other words, Freedom implies "for" as well as "from."

To illustrate, individuals desire to live *for* the purpose of finding deep meaning through the decisions and activities of their lives. At the same time, all want to be free *from* unforeseen life-threatening events or premeditated injuries that others might inflict. Even though no human being is free *from* the inevitability of biological death, within the constraints that finite existence imposes, every person and all societies live *for* the goals they deem desirable.

This means that the combination of "Freedom for and Freedom from," lies at the center of the human search for Truth. The "Freedom for" side of the equation underpins the quest to discover the right combination of ideas, values, and institutional arrangements that will secure present social stability and intergenerational continuity. In the midst of life's vulnerabilities, humans use self-reflection and problem-solving skills to discover reality. In this way, Freedom is connected inseparably to the human quest *for* Truth. At the most fundamental level of human existence, survival depends on Freedom *for* weighing the pros and cons of alternative views and *for* choosing the one that possesses the best odds.

Freedom is also multidimensional. That is to say, its modes of expression range from personal to institutional. At the personal level, the key aspects of Freedom are physical, psychological, philosophical, and spiritual. From the perspective of the broader society, Freedom encompasses cultural, religious, political, economic, and other societal dimensions. In effect, this means that the expression of Freedom becomes seamless. It embraces all aspects of community life, which range from the micro needs of individuals to the macro needs of society as a whole.

In sum, the need to survive, not only by instinct but also especially through culture, dictates that humans must possess Freedom in order to consider which of the many potential ways of finding personal meaning and ensuring social security work best. Because, as this book contends, some views of Truth possess greater potential *for* adaptive longevity than others, as much Freedom as possible should exist *for* both persons and cultures to weigh the pros and cons of competing views and to choose the one that will (1) increase the chance *for* continued existence and (2) reduce the risks of extinction that arise *from* wrong choices.

In other words, Freedom is the essential prerequisite that all human communities must possess in order to examine and live by the view of Truth that they believe will secure their short-term survival and enhance their long-term potential. In the chapters that follow, the issues of Truth and Freedom will be examined in detail for the purpose of demonstrating which view of Truth, more than all others, will shape the future of the emerging global village.

NOTES

1. Jeremy Black, ed., *The Atlas of World History* (New York: Dorling Kindersley Publishing, 2005).
2. William James's best known book is *The Varieties of Religious Experience: A Study in Human Nature* (New York: Simon & Schuster, 1997).

CHAPTER 2

Running the Long Race

Chapter 2 builds on the introduction and has a twofold purpose. The first is to show how the evolution of society into an emerging global village has complicated the issue of discovering and living by the Truth. The second is to demonstrate that the need for Freedom is greater now than at any other time in human history. The way to accomplish this dual purpose is to describe the changes that social evolution has undergone in its transition from a Premodern to Modern stage. No doubt, the rise of modern science contributed in a significant way to this transition, which also embodies other characteristics as described below.

Modernity did not burst into history in full bloom. However, once the Modern world began to emerge, it did not remain static. Like the shift from Premodernism to Modernism, the Modern period itself progressed in stages, beginning with simple modifications that surfaced in the Premodern world. These took root and then spread around the world to create the emerging global village. The following general comparison of Premodern and Modern societies will set the scene for a later description of the unique aspects of each. Postmodernism will be discussed later in the chapter.

To begin, there are many details that separate Premodern society from its Modern counterpart. However, there is one overarching contrast that connects all of these dissimilarities: Premodern societies were homogeneous, while Modern society is heterogeneous. This assertion might sound like an oversimplification, possibly even false, but the following discussion reveals that it is not. One of the main premises of this chapter is that major changes in the past 500 years of human history have transformed formerly isolated, homogeneous Premodern societies into a globally interconnected,

heterogeneous Modern society whose most advanced stage is the emerging, information-saturated global village.

This does not mean that prior to the emergence of Modernism the entire planet consisted of only one homogeneous community. From a global perspective, the earth has always been inhabited by multiple societies with diverse communities that possess alternative views of Truth. However, in general, human cultures have been highly integrated around one primary perception of Truth that, in the form of a worldview, served as the foundation for intergenerational continuity. Given the diversity of societies that emerged over thousands of years and on different continents separated by wide oceans and high mountains, the Premodern world as a whole was always highly heterogeneous.

However, in the Premodern period, the heterogeneous planet was populated by isolated and largely homogeneous cultures. While homogeneous cultures and subcultures are still very much present in the Modern world, they no longer exist in isolation. In Modern society, once-isolated Premodern cultures now interpenetrate each other with increasing speed and to an extent never before experienced on the earth. In this sense, as Thomas Friedman has observed, the earth is becoming flatter.¹

Stated succinctly, the pattern of “heterogeneous earth with isolated homogeneous cultures” has given way to “heterogeneous earth with increasingly interpenetrating and no longer isolated cultures.” Unless something totally unforeseen appears on the horizon, the global trend toward ever deepening intercultural penetration will continue well into the future as a result of the growing worldwide web of electronic communication and mass transportation. The earth is being transformed as never before. In a very real sense, it is a new world, and this emerging new world is the Modern global village. The days of cultural isolation are rapidly disappearing as the planet undergoes a steady transition toward globalization.²

In the Premodern world, cultural isolation reinforced each group’s perception that its view of Truth, which helped create social cohesion and from which its members derived personal meaning, was fixed and final. While it is no doubt extreme to assert that Premodern views of reality were static, in a very real sense they were, because their adherents perceived that they possessed an unchanging Truth that had been given once and for all. With the rise of Modernism, this changed. The Premodern perception of permanence gave way to the Modern awareness that the universe is dynamic and evolving.

It is one of the hallmarks of the Modern world that Truth is not just an unchanging body of beliefs that anyone can know by merely reaching out and grasping it as one would pull apples off a tree. Rather, the process of discovering and living by the Truth is open and ongoing. This means that while Truth can be affirmed to exist, humans cannot know it in full. In addition, if Truth were already known in full, there would be no need to continue trying to discover more of it or to believe that human life could be enhanced by applying it.

The difference between Premodern and Modern views of the Truth can be demonstrated readily by comparing the Genesis creation story and Aristotle's views of the universe against those of Charles Darwin and the discoveries of modern astronomy. The book of Genesis holds that God created the world in seven days through divine command. For the ancient Greek philosopher Aristotle (384–322 b.c.e.), God, which he called the Unmoved Mover or the Uncaused Cause, formed the universe and then let it alone to operate on its own without further intervention. God created an unchanging universe within which every object serves some purpose, or *telos*—such as the acorn whose reason for being is to become an oak tree. It has always been that way, and it will remain that way. The image of creation that both Genesis and Aristotle describe is that of a static cosmos within which the basic structure of the universe has been permanently set in place.

This view changed with the rise of modern science and the discovery of the evolutionary patterns that exist throughout the universe. The cosmos in its entirety, as well as life on earth, are not unchanging structures that are set down permanently or given once and for all time. Instead, both are constantly evolving in new directions. When Darwin first proposed his evolutionary ideas in the mid-19th century, they contrasted sharply with the Premodern biblical story of a seven-day creation.³

For Darwin, all earthly species, including humanity, evolved over hundreds of thousands of years as a result of natural selection and survival of the fittest, which means that they were not created through divine command. In addition, according to modern astronomy, the universe was not created a few thousand years ago in one week. Instead, it burst forth abruptly around 14 billion years ago because of a gigantic Big Bang explosion that produced the billions of constantly changing galaxies that currently populate the cosmos.

As a result of these and other scientific discoveries, the Modern view of the evolution of the universe and of life on earth emerged: the entire cosmos exists in a state of constant flux even though the pace of change is hardly ever perceptible to the finite human eye. This means that old structures, both physical and social, give way to new ones, which later are replaced by even newer ones, which over time become older and are replaced by others. Simply stated, in contrast to the Premodern view that the structure of the universe is stagnant, the Modern view is that it is emergent and open-ended. Given this overarching difference between the two types of societies, by what process did Modern society displace the Premodern perspective?

PREMODERN

No doubt, the experience of change is an inherent aspect of both Premodern and Modern societies. Life moves forward from birth to death, the seasons come and go, leaders rise and fall, and so on. In a word, in every time and place, it is a universal human experience that things change. If so, then how is it possible to claim that Premodern societies adhered to a

stagnant view of Truth whereas Modern society sees Truth as emergent? In order to answer this question, it is necessary to compare the mental frameworks through which Premodern societies interpreted the many changes they witnessed against those employed by Modern societies.

In Premodern perceptions, all physical and social changes occur within a well-ordered universe with clearly defined boundaries that are permanently set in place. Everything that happens can be explained in terms of this fixed framework, and nothing falls outside of it. Even though many changes take place within this framework, it is the framework itself—that is, the very structure of the cosmos in its entirety—that does not change. Two frameworks in particular appear with regularity in Premodern depictions of the unchanging structure of the universe. The first is linear and the second is cyclical.

A few examples will illustrate this point. Seven of the world's major religions, which currently include around 75 percent of the earth's population, arose during the Premodern time period. Four started in the Middle East (Zoroastrianism, Judaism, Christianity, and Islam), and the other three originated in South Asia (Hinduism, Buddhism, and Jainism). The four Middle Eastern religions hold to a linear view of time and of the fixed structure of the universe, and the South Asian spiritualities adhere to a cyclical view. The competition among these enduring world religions and the role that they are assuming in the emerging global village will be discussed in depth in chapter 6.

In the shared linear view of the Middle Eastern faiths, God created the universe at the beginning of time and will bring it to an end at some future date known only to God. In between these alpha and omega points, God has revealed specific scriptures, doctrines, and moral rules by which God expects humans to live. At the end of time, God will judge all persons according to whether they accepted these revelations and lived by God's rules. God will then determine everyone's eternal destiny in heaven or hell. Everything that happens as time passes from start to finish occurs within the fixed linear framework that God created.

The South Asian religions also adhere to the conviction that the structure of the universe is set in place permanently, and they share an identical view of time and change. However, they view these as cyclical, not linear. In the linear outlook, the process of change moves forward in a straight line from a distinct starting point to a predetermined end point that only God knows. All unfolding events are unique and are not repeated. Within the cyclical framework, however, the universe has no definitive beginning or end. Rather, the same people and events appear repeatedly within a cosmic process that recycles endlessly. As one author has noted, for the Asian religions, "The universe simply moves through endless changes, which repeat themselves over grand periods of time."⁴

Typically, the adherents of cyclical views perceive that the universe alternates between the stages of prosperity and catastrophe. During the first

stage, good fortune permeates the world. It is a time of generosity, wellness, and riches for all. Goodwill flourishes, and the unleashing of positive energy leads to constructive outcomes. However, this stage does not last. Gradually and inevitably, good fortune gives way to bad fortune. Selfishness replaces generosity, sickness overcomes wellness, poverty drives out wealth, and the world deteriorates. When the cycle ends, it starts all over again with no destiny other than to repeat itself forever.

In linear images, God chooses special mediators to reveal the divine mandates by which all persons will be judged as time moves in a straight line toward a final end point. In cyclical theories, the appearance of special messengers, such as Hindu avatars or Buddhist monks, marks the start of the downturn from the high point of stage one to the pit of stage two, which ends in calamity. During the time of decline, enlightened religious messengers appear and set forth spiritual guidelines to help humanity escape the growing chaos and achieve spiritual bliss. After stage two has run its course, the cycle starts all over again.

Thus, as in the Modern world, the inhabitants of Premodern societies experienced the realities of physical and social change in all its many forms. What separates them from Modern society is the way in which they understood it. Whether through linear or cyclical images of reality—that is, of Truth—they viewed the shifting tides of their daily lives through the prism of a preset universe. With the advent of Modernism, the Premodern point of view began to give way to a new and revolutionary image of change.

MODERN

It is clear from the above examples that the Middle Eastern and Asian religions approached the topic of change by combining both heaven and earth (metaphorically speaking). This means that they did not limit their change images exclusively to the earth's physical or social transformations. Rather, they always integrated the experience of earthly change into a larger conceptual framework that encompassed divine purposes and patterns. With the rise of the Modern era, interest in the topic of change shifted away from combining both heaven and earth to focusing only on the earth.

Just as Darwin and modern astronomers used the scientific procedures of modern science to study the physical universe (biological evolution on earth and galactic developments since the Big Bang), 19th-century human scientists began using similar methods to analyze social change. In their attempt to duplicate the natural law discoveries of physical scientists, historians and social scientists set out to ascertain whether universal laws might also drive history and societal development. In the process, they set forth many ideas, which, like those of their Premodern predecessors, can be grouped into both cyclical and linear points of view. While both approaches offer insight into the nature of historical change, linear theories have demonstrated

that they can explain in greater depth how Modern society evolved out of its Premodern origins.

This does not mean that cyclical views have not left their mark. They have. Two in particular stand out. These will be described briefly, and an extended discussion of the dominant modern view of linear social change will follow. The two most important views of cyclical change can be called the rise and fall theory and the ebb and flow theory. The rise and fall framework emphasizes the role of great leaders who advance their society's development and bad leaders who cause their demise. The ebb and flow viewpoint is also called the oscillation theory.

One of the world's great historians, Arnold J. Toynbee (1889–1975)⁵ is the best-known interpreter of the rise and fall cyclical view of historical change. During his long professional career, Toynbee spent decades analyzing the growth and decline patterns of 21 different ancient and modern civilizations, including the early Egyptians, Babylonians, Chinese, Mayans, Minoans, Western and Eastern Christendom, and the Ottomans, among others. At the end of his research, he concluded that all of these civilizations show evidence of a common pattern. Despite their enormous diversity in the area of cultural norms and institutional arrangements, all had undergone a process of birth, growth, stagnation, and collapse.

Good leadership accounted for the birth and growth of all 21 civilizations, and bad leadership brought forth their eventual demise. As good leadership gave way to bad, elites at the top lost the allegiance of supporters in the middle and commoners at the bottom. When this happened, as it did in all of these civilizations, social division set in and the drift toward disintegration gained momentum. As this pattern spiraled out of control, it was only a matter of time before the leadership could no longer count on the disaffected segments of the populace to defend against internal rebellion or external invasion. Sooner or later, the despised elites were overthrown and new leaders emerged to start the cycle all over again.

However, despite the recurrence of this centuries-old cyclical pattern, Toynbee was quick to point out that the collapse of any given civilization was not inevitable, even though the lessons of history might suggest otherwise. If leaders and their followers can remain united and respond successfully to new challenges, then their societies stand a better chance of long-term survival. Thus, after decades of research, Toynbee concluded that there exists a universal law of social change that can explain the rise and fall of diverse civilizations that have appeared during different time periods and in various geographical locations irrespective of their unique historical circumstances.

Just as Toynbee's writings are exemplary of the rise and fall cyclical view of change, Pitirim Sorokin (1889–1968) best describes the oscillating, or ebb and flow, perspective.⁶ The essence of his ideas can be summarized easily even though his description of the details of diverse cultures is elaborate. For Sorokin, all cultures are highly integrated systems that oscillate between

three major themes: the idealational, the sensate, and the idealistic. Idealational societies emphasize beliefs that are based on religion and the supernatural. Sensate civilizations validate their views of reality by appealing to knowledge derived from the senses. They also lean toward materialism and hedonism. Idealistic civilizations use rationality to combine the two, striving for a balance between sensory experiences and religious faith.

According to this view, no linear pattern exists in history and there is no final end toward which all social change is headed. In addition, during any given historical epoch, none of the three themes exists by itself to the exclusion of the other two. The three always appear together, although one is usually primary and the other two secondary. The themes ebb and flow as societies develop, change over time, and become superseded by other cultures. When societies undergo historical transitions, so does the relative emphasis of the three themes.

Both internal and external factors can bring about a shifting balance between the themes. Successful military invasions by outsiders as well the development of new ideas by insiders can result in redirecting a culture's thematic preferences. As societies develop and advance in complexity, they eventually integrate their dominant themes into virtually every domain of social life. When they do, they exhaust their potential to go further, which prepares the way for the next thematic oscillation.

Sorokin observed that Western culture had been dominated by the sensate theme for centuries. Like his contemporary, Oswald Spengler, he believed that the West was in a state of decline, as symbolized by the tyranny, moral deterioration, and loss of freedom that two world wars, a global depression, and the Cold War left in their wake. As he saw it, the world was ready for a thematic change toward either an idealational or idealist culture.

The writings of both Toynbee and Sorokin express very well two influential views of cyclical change, and they are insightful in their observations. However, they are limited in three very important ways. Neither can explain (1) how the Modern world emerged out of its Premodern predecessor, (2) by what process the Modern world continues to evolve, and (3) in what direction the Modern world appears to be moving. This task can be accomplished only by turning to a linear model of social change.

There is no doubt that the most significant linear view of the factors that ushered in the Modern world focuses on the impact of science, technology, and industrialization. While not everyone agrees that the effects of these three driving forces have always been positive, and in some cases there is vehement resistance against them, virtually everyone concedes that they are the prime movers of social change over the past 200 years. Their transforming influence has been second to none throughout the long march of human history. In combination, they caused the demise of Premodernism and the rise of Modernism.

In addition, the modern theory of human progress is closely tied to all three of these forces. According to this theory, (1) science discovers the laws

of nature, which (2) industries apply to the development of innovative technologies, which (3) society uses to eliminate ills of all types by, for example, elevating standards of living, communicating more effectively, creating more jobs, lowering costs of commodities, and so on, which (4) leads to steady progress in improving the human condition. The following discussion will describe how this theory of progress developed concurrently with the emergence of Modern society and its successes and failures. That is to say, the theory of progress has attracted wild-eyed proponents, as well as harsh opponents, who lash out in a relentless critique of the destructive power that the Modern world has unleashed on the planet.

As the forces of modern science, technology, and industrialization advanced steadily over the past two centuries through the discovery and application of the laws of nature, they gave birth to the Modern world. It is the founder of modern sociology, Auguste Comte (1798–1857), who stands at the front of the line in his optimistic portrayal of the Modern world's inevitable movement toward human perfectibility. He summarized his vision of social progress with the term Positivism.

Like many of his 19th-century contemporaries, Comte espoused a general optimism anchored in a belief in human progress. According to his view, social evolution marches forward through three distinct stages. The first two are the Theological and Metaphysical stages. Together they prepare the way for the third and final stage, Positivism. Comte was deeply committed to the belief that there exists a natural law of human evolution based on the “instinctive tendency of the human race to perfect itself.”⁷ As a result of his writings, the philosophy of progress came to inform much of the Modern world's belief in the inevitability of human perfectibility.

Comte based this belief on the discoveries of modern science and their application to new technologies that would lead to the progressive elimination of ancient scourges such as sickness and social chaos in ways that Premodern society could not even imagine. His optimism moved him to conclude that humanity would automatically seek to improve itself once the tools were in hand to do so. Simply stated, according to his linear approach, as social evolution moves into its Positive stage, modern science will open the door to the possibility of human perfectibility that technology will guarantee.

Both the Theological and Metaphysical stages of evolution helped pave the way for Positivism by searching for the objective causal explanations by which nature and society operate. The key differences lie not in this shared pursuit, but in the superiority of the methods of modern science to more accurately and therefore more truthfully uncover how the laws of nature and society actually operate.

During the Theological stage, humans attributed causality to specific supernatural beings that govern human affairs according to their own desires. During the Metaphysical stage, explanations involving abstract forces re-

place those that attributed causality to supernatural beings. In the Positive stage, science serves as the framework for explaining causal relationships based on modern methods of rational-empirical inquiry.

Comte recognized during his own lifetime that all three stages continued to exist side by side and that the Positive stage had not yet completely displaced the other two. In order to usher in the third and final stage of human evolution, Comte proposed the creation of a Religion of Humanity based on celebrating the many accomplishments that he believed were contributing to human improvement. He also called for the development of a new priesthood of social scientists that would conduct the celebrations and provide the leadership and education that would quicken the pace of progress toward Positivism.

Comte's influence, while not as widespread now as it was during the late 19th and early 20th centuries, has nonetheless left an indelible mark on the Modern world. Before discussing the pros and cons of his Positivist legacy, it is appropriate to describe the views of other important writers who also made significant contributions to the modern linear view of social change. Even more controversial than Comte has become at the start of the third millennium, but standing shoulder to shoulder with him, is Herbert Spencer (1820–1903).

Spencer, more than anyone else, applied Darwin's ideas about natural selection and survival of the fittest to the development of society. Like Comte, Spencer proposed that society evolves through stages. However, unlike Comte, he did not focus as extensively on the effects of science and technology. Rather, he aimed his analysis of social evolution at the impact of industrialization as it was emerging under the conditions of mid to late 19th-century Western capitalism.

Industrialization is a process associated with changes that occur in the technologies by which a society produces the physical goods necessary to sustain itself at a minimum level or to achieve some culturally defined standard of material prosperity. According to one author, "Industrialization means the extensive use of inanimate sources of power for economic production, and all that that entails by way of organization, transportation, communication, and so on."⁸ In addition, industrialization "includes mechanization of agriculture, and of the ancillary services of transportation and communication which are essential to the operation of a specialized and therefore interdependent economy."⁹ These views are consistent with the way in which Spencer developed his understanding of the industrialization process.

In addition, paralleling Darwin's beliefs about biological change, Spencer held that the driving force of social evolution is struggle. Just as plants and animals compete against each other, so do human communities. In the process, some win and some lose. Superior societies endure while weaker ones perish. That is to say, only the fittest survive.¹⁰ In order for any given

society to increase its potential for long-term survival, it must undergo specific internal changes as it evolves. If it does not do so, then it will be outcompeted by those that are stronger.

Just as Darwin maintained that through evolution the inner organs (heart, lungs, brain, etc.) of the fittest biological species increase in complexity and coordination, Spencer held that societies must follow this same line of development in order to survive. As societies become more multi-layered, differentiated, and specialized, their social, political, and economic structures must become more mutually adaptive and interdependent. He labeled this as Modern industrial society's need for coherent heterogeneity in contrast to the homogeneity of Premodern agrarian groups. Any industrial society that does not progress in its ability to integrate its growing complexity gradually undermines its competitive position relative to those that do.

As Spencer surveyed the long sweep of history, he identified two main phases through which he believed humanity has been evolving. Social evolution started at a primitive agrarian and military stage and has been moving toward a higher and more advanced industrial stage. In the first stage of evolution, primitive societies fought each other for territorial control in order to acquire enough land to accommodate growing populations. In the second stage, as industrialism spread steadily around the world, laborers migrated to cities in order to find work in the expanding factory system. As a consequence, industrialized nations no longer needed to resort to war as a means of resolving intergroup conflict. Cooperation and nondestructive competition replaced the hatreds and hostilities that characterized primitive Premodern societies.

By definition, primitive societies are held together by force from the top down. The individual is quite literally "owned by the State."¹¹ In contrast, industrial societies are organized from the bottom up to increase prosperity, not to acquire new territory through military conquest. For Spencer, one of the major benchmarks of the industrialization process is respect for the individual. As humanity evolves, the autocracy of primitive military tribes gives way to the democracy of advanced industrialized nations. The leaders of government are elected democratically for the purpose of protecting the rights of individuals to own property and to compete in the marketplace, where the fittest members not only thrive but also contribute to the ongoing evolution of the Modern industrial society.

Even though Spencer extolled the virtues of industrialism, unlike Comte he was no unrestrained optimist. Instead, for Spencer, the gains of industrial society could always be reversed through the actions of modern-day dictators intent on military expansion, a perspective that proved to be all too true during the 20th century. However, on the whole, he was more of an optimist than a pessimist. As an analyst of social evolution, he joined with others in identifying many of the salient aspects of Modern society.

Through Spencer's 19th-century eyes, it appeared as though England met all of the criteria for success, that is, survival of the fittest. This is, of course, the heart of his narrow ethnocentrism. Like many others, he remained blind to the reality that European and Japanese colonial expansion was blanketing the world through military conquest. It took Karl Marx, whose ideas will be discussed later in chapter 8, to point out that Spencer's ideas merely served the economic interest of the ruling classes of the Modern industrial-capitalist society. As the turbulent 20th century unfolded, the most highly developed industrial nations of Europe and Asia bloodied each other with unprecedented levels of carnage, which finally ended when the United States leveled Hiroshima and Nagasaki with atomic weaponry that incinerated over 200,000 Japanese.

Nonetheless, like Comte, Spencer should be given his due, because he added to the growing number of voices that were defining the nature of the new society that they witnessed growing all around them. Like Toynbee, who epitomizes the cyclical view of social change, linear thinkers like Comte and Spencer were keenly aware that many civilizations have come and gone. While widespread disagreements continue to exist even to this day over why this pattern reappears so often throughout human history, there is a general consensus that the fittest societies ultimately do survive, no doubt for a variety of reasons. For Comte, science and technology are leading the way to the emergence of a superior Modern society as it evolves toward a third and final stage, Positivism. For Spencer, industrialization, integrated heterogeneity, and individualism are some of its defining characteristics.

Together, Comte and Spencer helped define in broad terms many of the main features of the Modern linear approach to social evolution, even though a number of their 19th-century notions are now outmoded. However, within the context of this wide framework, other influential writers began to fill in the details. For example, as a result of increasing migration into urban areas, Ferdinand Toennies (1855–1936) observed that traditional social structures were undergoing a major modification. In terms of his native German language, he described this emerging pattern as a change from *Gemeinschaft* to *Gesellschaft*—that is, from the face-to-face intimacy of the small rural community to the impersonal encounters of the large urban society.¹²

Toennies lamented this new direction, even though he identified it as one of the irreversible transformations of Modern society. He much preferred the holism of human relationships that he believed were prevalent in rural communities to the fragmented encounters he experienced in the city. Emile Durkheim (1858–1917) reinforced Toennies's observations by noting that individuals have a more stable sense of self in supportive rural settings than in urban locations, where they often experience a crisis of identity and role confusion that he called *anomie*. Noting that suicide rates were higher in cities than on farms, Durkheim concluded that moving to the city

brought liberation from rural-life drudgery for many migrants, whereas for others it was devastating.¹³

Of the increasing number of observers who began commenting on the nature of the modernization process, two in particular stand out: Howard Paul Becker (1899–1960) and Max Weber (1864–1920). In combination, they held that one of the dominant features of Modern society is its increasing drift toward secularization. Like Comte, who coined the word Positivism to describe the most advanced stage of social evolution, both Becker and Weber maintained that progress in science and technology would lead to the rise of some form of philosophical naturalism that would supersede religious supernaturalism as the basis for determining causation. Over time, Modern society will increasingly rely on its understanding of natural law, not divine intervention, to explain how and why events in nature and society occur. Stated simply, modernization and secularization push the gods or God into the background and ultimately out of the picture altogether as an explanation for anything.

What Comte defined as a three-stage process of social evolution that culminates in Positivism, Becker described as a two-stage shift from the sacred to the secular.¹⁴ Weber added that the transition from Premodern to Modern society leads to “disenchantment.”¹⁵ By this he means that society gradually removes mystery from every arena of life. Like Becker, Weber believed that society is becoming less sacred and more secular, and that eventually all events in both nature and society will come to be explained through empirical rationality and not heavenly intercession. A steady stream of technological innovation provides the Modern world with increasing control over nature so that it does not merely adjust fatalistically to it according to beliefs in some Premodern divine plan.

Together with others, the writings of Comte, Becker, and Weber contributed to one of the initial images of the direction in which Modern society would inevitably move as it emerged out of Premodernism: the demise of religion. Has this in fact happened? The answer is no. To even the most casual observer of present trends, whether or not he or she is religious, this early prediction has been shown empirically to be false. Nor is religion likely to disappear at any time within the foreseeable future. As the continuing presence, vibrancy, and growth of many of the world’s diverse religions throughout the late 20th and early 21st centuries demonstrate, not only has religion not disappeared, its billions of followers have shown that religion and science can coexist compatibly in the Modern world. No doubt, this is because they cover separate realms of human experience. Modern science concentrates on the acquisition of rational-empirical knowledge, and religion focuses on spiritual faith, which will be discussed in depth in chapter 6 along with its relationship to Truth and Freedom.

The continuing presence and vitality of the world’s many religious traditions might lead one to conclude that the concept of secularization, which Becker, Weber, and others used to project the demise of the sacred, is no

longer relevant as a means to explain changes that have occurred in the Modern world. However, this is false. Like religion itself, the concept of secularization has not disappeared—nor should it. Rather, it has been reinterpreted in two significant ways that shed light on the direction of social evolution during the past 200 years.

While it is clear that science does not eliminate religion as 19th- and 20th-century secularization theory originally predicted, modern science nonetheless has had a profound effect on religion in this way: science has altered the role of religion not by eradicating it but by privatizing it. The process by which this occurred is well-known and has been explained elsewhere in considerable detail.¹⁶ In truth, this understanding of secularization, more so than the Comte-Becker-Weber view, describes the actual historical pattern that has evolved between the sacred and the secular during the past 200 years.

In Premodern society, religion and its priestly leaders defined and dominated all areas of society, from dress codes to dietary laws to economic and political behavior. In Modern society, privatization has led progressively to religion's loss of control over these and other arenas outside of its immediate sphere of influence. This does not mean that the world's diverse religions have ceased to bring meaning to billions of believers. They still do. Nor does it mean that religion has ceased to influence areas outside of its own sphere. It continues to do this also, though more indirectly.

What the privatization view of secularization means is that one of science's main influences has been to disconnect religion from direct domination of other social arenas. Over the past two centuries, empirical methods have been applied to nonreligious areas to determine the laws or procedures by which they can operate on their own. This can be shown through the following examples: economic behavior is governed by the law of supply and demand; democracy rests on individual voting rights; community education operates through governmental support; and so on. In the Modern world, institutions that were once integrated under the domination of religion become differentiated into their own autonomous domains free from the control of religious elites.

While there is interaction between all social institutions at some level, each can function independently within its own sphere without religious oversight or control. At the same time, religion continues to exist and, indeed, to thrive, even when it becomes privatized and not publicly subsidized. With the differentiation of activities that has emerged as a result of modernization, religion continues to flourish when it focuses primarily on the spiritual needs of both individuals and communities. Thus, in Truth, it is the privatization of religion and not its elimination that best defines how secularization operates in the Modern world. As will be shown in the last chapter, it is this meaning of secularization (i.e., religious privatization) that is one of the causes of many of the world's current political and military problems.

Another way in which secularization has been reinterpreted involves neither elimination nor privatization. Instead, it refers to indifference as measured by weekly church attendance. In comparison to Premodern societies, those areas of the world that have benefited from industrialization and modernization have experienced widespread economic affluence and opportunities for personal self-development outside the realm of religion. Many activities involving music, art, sports, politics, private clubs, and leisure travel, among a wide range of others, offer ample opportunities for individuals to find fulfillment apart from religious groups of any kind.

This does not mean that people who continue to be involved in religious organizations or pursue personal spiritual goals do not also participate in a full range of nonreligious activities. They do. At the same time, the Modern world provides many secular channels for self-expression that did not exist during Premodern times. While the privatization of religion has become the dominant pattern of secularization in the Modern world, there are many who accept Comte's Positivism or the Becker-Weber view of secularization as disenchantment that results in the elimination of interest in anything spiritual or supernatural. As a general rule, thoroughly secularized individuals who fall under this meaning of the term do not find personal meaning through religion but rather through participation in secular activities of one kind or another. They embrace lifestyles that embody a deep indifference to all forms of human religiosity.

The combination of modern science, technology, industrialization, and secularization, especially in the form of privatizing religion, has given rise to one overarching global image of human evolution during the past several centuries: westernization. For better or worse, many countries in the non-Western world have fully or selectively embraced westernization as the pathway to progress, while others have vehemently rejected it. In order to comprehend these diverse reactions, it is necessary to understand the major social and political changes that occurred throughout the world during the last 400 years.

As a result of unique historical circumstances, modern science, technology, industrialism, and secularization first arose in the West and subsequently spread around the world. Without exception, for good or ill, every nation on the earth—from Albania to Zimbabwe—has felt the impact of westernization. Because the modernization process started in Europe, the West was able to convert the advantages of science, technology, and industrial development into overwhelming military and political superiority.

Then, through an aggressive policy of invasion, capture, occupation, and control, the West set out to conquer the Premodern regions of the world. Due to military might that was disproportionately larger than that of other countries, by the end of the 19th century, European nations such as England, France, and others came to dominate 85 percent of the world's population. From that point forward, like so many other rise and fall cycles that

preceded the 20th century, history started repeating itself. European colonial domination began to crumble.

As the 20th century unfolded, scores of independence movements arose in the subordinated nations of Asia, Africa, and the Middle East and threw off the yoke of colonialism. As these newly independent nations began to take their place on the stage of world politics, the Cold War between the United States and the Soviet Union erupted during the last half of the 20th century and pulled the rest of the world into its wake. When the Soviet Union dissolved and the Cold War ended during the 1990s, the United States stood as the world's sole superpower. Since then, many postcolonial and post-Cold War nations have continued to grow in strength. The bipolarity that dominated the world from the mid to late 20th century, along with the U.S. dominance that followed, has given way to the increasing multi-polarity of the early 21st.¹⁷

As a result of these dramatic changes, the world now faces a new set of daunting political challenges between nations and groups with different religions and cultural norms. Among the populations of many of these countries, especially throughout Islamic regions, there is growing resistance to what is perceived to be the long-term destructive consequences of Western colonialism. Muslim radicals committed to violent jihad, like bin Laden and those he inspires, are quick to condemn westernization because of its perceived godlessness, immorality, separation of the sacred from the secular, and indifference to religion.

In other words, they define westernization, and, in some cases, the totality of influences that modernization introduced into the world, especially as symbolized by the creation of the modern state of Israel by the United Nations in 1948, as an insidious attack against their traditional way of life. No doubt, the potential long-term impact that terrorist groups such as Al Qaeda and the Taliban will have on the future is one of the major issues confronting the emerging global village of the 21st century. How this confrontation will affect the concern for Truth and Freedom will be discussed extensively in the last chapter.

POSTMODERNISM

As described above, modernization emerged out of a combination of several forces, namely science, technology, industrialism, secularization, westernization, and colonialism, whose connections are complex and multilayered. As a result of the dynamic modification that the process of modernization has produced, many observers of social change claim that Modernism is giving way to a new Postmodern world. However, this is incorrect. Modernism is not disappearing, but is rather entering an advanced stage of evolution for which there are many new labels and descriptions.

In truth, Postmodernism should be called Postpositivism, because it is mainly a critique of the rosy optimism of Comte, Spencer, and others and their unwarranted presumption that (1) science, technology, and empirical rationality will produce a superior Modern world, and that (2) the industrialized West, as the world's most advanced and therefore fittest civilization, will outcompete all the rest and lead the way. Another way of saying this is that Postmodernism does not describe how modernization is evolving in an empirical sense. Rather, it is a school of criticism regarding how and why the Modern world has wrought more harm than good.

Postmodernism reached its apex in the middle of the 20th century, at which time it enjoyed widespread support among many social critics, especially numerous academicians within European and American universities. Since then, its influence has been in decline. At the same time, Postmodernists should be given credit for pointing out many of the inherent limitations and negative outcomes of the modernization process. For example, they have exposed many of the inequalities and patterns of discrimination that Modern society masks. They have condemned unjust hierarchical structures based on wealth, class, social status, race, sex, ethnicity, nationality, and other demographic factors that give some individuals and groups unfair advantages over others. For Postmodernists like Michel Foucault and Jacques Derrida, the benefits of Modernism go disproportionately to those who exploit their positions of power and privilege by discriminating against those who are disadvantaged for any number of reasons.

During the 1960s and 1970s, the inadequacies of Postmodernism as a conceptual tool to explain how Modern society might actually evolve—that is, to do more than merely critique it—became increasingly apparent. In its place there have emerged alternative descriptions of the next stage toward which the modernization process is already heading, both now and in the future. For example, Edward Cornish, who founded the World Future Society in 1967, calls the most important mega-trend of the 21st century the Great Transformation. In his view, there have been three great technological revolutions along with an emerging fourth: the Agricultural, Industrial, Cybernetic, and Biotech revolutions. These shifts occur because of changes in technology, which he identifies as grain cultivation, steam-powered engines, the computer, and genetics.¹⁸

Because Modern society is, by definition, dynamic and ever changing, the last three of Cornish's stages of the Great Transformation can readily be included into the modernization process. The Modern world is not vanishing. Instead, it is being transformed by major technological innovations in the fields of information processing, mass transportation, and genetic research. Another way to say this is that the first stage of the Great Transformation, the Agricultural stage, is associated with Premodernism. The last three stages are successive modifications that have taken or are taking place within Modern society as a whole. Information technologies and bio-

technologies are not Premodern, anti-Modern, or Postmodern. Rather, they are Modern in every sense of the word because they have evolved within the scientific and industrial infrastructure of Modern society.

Normally, the stages of social evolution are described according to employment percentages. According to Figure 2.1, below, when the largest percentage of laborers work on farms, society can be defined as Agricultural. Then when more than 50 percent of all employees work in factories, society shifts from being Agricultural to Industrial.

This does not mean that food production disappears. It means simply that the number of people who work in agricultural jobs drops below 50 percent. Due to the incredible advancements that were made in food production technologies during the 20th century, less than three percent of all U.S. workers now hold agricultural jobs. At the same time, they produce enough food for the entire nation and beyond.

The same holds true for the relationship between the Industrial and Cybernetic stages of modernization. Information- and service-oriented employment has passed the 50-percent mark relative to factory workers. This does not mean that industrialization has ceased. It means that computer applications within factories have reduced the need for human labor. The

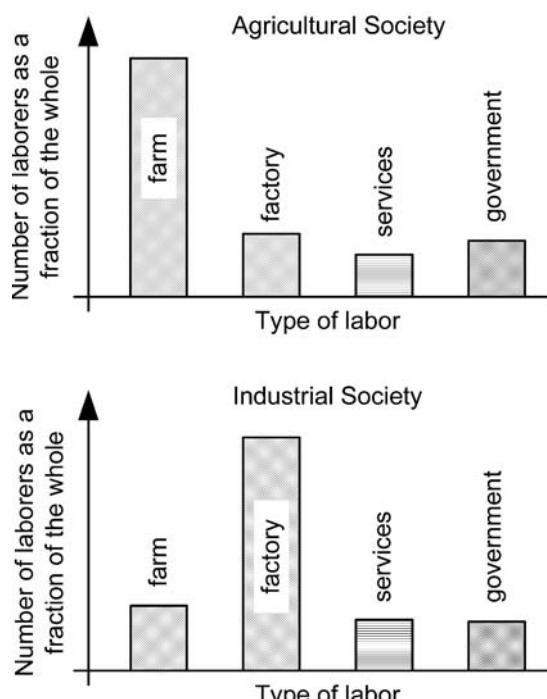


Figure 2.1 Labor Comparisons between Agricultural and Industrial Societies.

vast majority of material goods are still produced in factories. Industrialization has not disappeared. It has been transformed. Moving into the Cybernetic stage of the modernization process means that more than 50 percent of all employees work within the Information and Service sectors of the economy, meaning there are fewer jobs on farms and in factories. For Cornish, the last stage of the Great Transformation, the Biotech stage, is a projection of the next phase of social evolution in Modern society based on discoveries and applications that are emerging rapidly in the field of genetics.

As a result of the dramatic transformations that have occurred within the scientific, technological, and industrial framework of the Modern world, many other authors have offered an array of vivid images that they believe best depicts the future of social evolution in the 21st century and beyond. Daniel Bell writes of the arrival of the Post-Industrial Society,¹⁹ Francis Fukuyama of the impending Posthuman Future,²⁰ Thomas M. Georges of the coming Digital Soul,²¹ Ray Kurzweil of forthcoming spiritual machines,²² Yoneji Masuda of the presence of the Information Society,²³ Douglas Mulhall of the emerging Molecular Future,²⁴ and Nikos Prantzos of nothing less that the unfolding of the entire Cosmic Future.²⁵

As is readily apparent, these myriad projections of the next stage of human evolution exclude reference to Postmodernism. This is because Postmodernists do not forecast possible and plausible alternative futures. Instead, they critique the weaknesses and vulnerabilities of Modernism of which, no doubt, there are many, especially when measured against Positivists' inflated predictions of human perfectibility, the persistence of discrimination, growing worldwide inequalities, and past expressions of Western condescension toward other cultures. However, as a means of forecasting an actual empirical future, Postmodernism is not a useful conceptual tool.

Instead, authors like Cornish and those described above have forecasted alternative futures that have already come to pass, in part or in full, or are appearing on the horizon as potentially new futures. When taken in their entirety, these authors offer intriguing insights and foresights into the current or next stage of the modernization process. Masuda's image of the Information Society overlaps with Cornish's Cybernetic stage. However, Bell's reference to the Post-Industrial Society could more aptly be described as Advanced-Industrialism in its Cybernetic-Information stage. Mulhall's Molecular Future parallels Cornish's Biotech vision.

Images of a future in which the world will become Posthuman, witness the arrival of spiritual machines, experience Digital Souls, or in which Cosmic purposes will be revealed remain the most speculative, bordering on science fiction. What is clear at this point in the evolution of the Modern world, however, is that the Cybernetic-Information stage of the modernization process has spawned a worldwide web of instant communication

that is fostering globalization and that genetic science foreshadows continuing human transformations throughout the 21st century and beyond.

Thus, the remaining chapters of this book will use only the Premodern-Modern distinction when describing social change. For the reasons stated above, Postmodernism will not be included except in chapter 5, where it will be discussed briefly. In addition, any descriptions of stages, modifications, or challenges related to the future of Truth and Freedom in the global village will assume that the Modern world has not disappeared. Instead, it has evolved and continues to evolve through distinct stages.

CONCLUSION

Several conclusions can be drawn from the above discussion. To begin, whether in ancient or modern form, there are only two overarching images of social change. The first is cyclical and the second linear. They appear in both Premodern and Modern forms. Premodern views are based on religious and philosophical speculations that range from Eastern cyclical interpretations like those found in Hinduism or Buddhism to Western linear views based on books like the Bible or the Quran. In whatever form, Premodern views are anchored in supernatural beliefs that interpret social change in light of the perceived purposes of God or the gods. Both cyclical and linear views of change incorporate evolutionary stages that in some cases lead to overall human betterment and in others to cosmic deterioration.

Modern views of change parallel the cyclical and linear approaches that appear in Premodern times with one major exception. Modern interpretations rest on the rational-empirical methods of modern science and seek to explain change in terms of natural laws and not supernatural intervention. The writings of Toynbee and Sorokin are two of the best-known modern depictions of historical change as cyclical. The most widespread approach that underpins virtually all of the linear images of social change in the Modern world is evolution, in one form or another, along with diverse interpretations of the inevitable stages of growth and/or decline through which society moves.

Amidst the myriad factors that are perceived to cause evolutionary change, several stand out. They are modern science, technology, industrialization, and secularization, all of which are identified with westernization. In combination, they created the Modern world. While colonialism shaped much of the political history of the past four centuries, its influence declined dramatically during the 20th century. If there is one word that (1) encompasses all the factors listed above, (2) summarizes the spectacular changes that occurred during the past two centuries, and (3) most likely will determine the next stage of human evolution, it is modernization. Virtually all of the above writers who describe the changes that have occurred

from Premodern to Modern society build on this assumption. For centuries, modernization has altered the world like no other power before it; and unless something completely unforeseen reverses its course, modernization will continue to be the driving force that shapes the future of Truth and Freedom in the emerging global village.

NOTES

1. Thomas L. Friedman, *The Earth Is Flat: A Brief History of the Twenty-first Century* (New York: Farrar, Straus and Giroux, 2005).
2. The topic of globalization, along with views of important writers who have written about it, are summarized in Thomas R. McFaul, *The Future of Peace and Justice in the Global Village: The Role of the World Religions in the Twenty-first Century* (Westport, Conn.: Praeger, 2006), chap. 1.
3. Charles Darwin, *Origin of Species* (New York: D. Appleton, 1859), and *The Descent of Man* (New York: D. Appleton, 1880).
4. Michael Molloy, *Experiencing the World's Religions: Tradition, Challenge, and Change*, 4th ed. (New York: McGraw-Hill, 2008), p. 13.
5. Arnold J. Toynbee is best known for his 12-volume series, *A Study of History*, which he wrote from 1934–61. All volumes were published by Oxford University Press.
6. Pitirim Sorokin developed his ebb and flow ideas in *Social and Cultural Dynamics*, 4 vols. (New York: American Book Company, 1937–41).
7. Auguste Comte, "General Appendix: Early Essays," in *Social Change*, eds. Amitai and Eva Etzioni (New York: Basic Books, 1964), p. 18. Also see Auguste Comte, *The Positive Philosophy*, vol. 2 (London: Kegan Paul, Trench, Trubner and Company, 1893) for an elaboration of Comte's Positive Philosophy.
8. Wilbert E. Moore, *Social Change*, 2nd ed. (Englewood Cliffs, N.J.: Prentice-Hall, 1974), p. 96.
9. Ibid., p. 97.
10. Herbert Spencer, *Sociology*, vol. 1 (New York: D. Appleton, 1892); also see Herbert Spencer, *First Principles of a New System of Philosophy* (New York: DeWitt Revolving Fund, 1958).
11. Herbert Spencer, *Principles of Sociology*, ed. Stanislav Andreski (London: Macmillan, 1969), p. 503.
12. Ferdinand Toennies, "Community and Society: Gemeinschaft und Gesellschaft," in *Social Change*, ed. Amitai and Eva Etzioni (New York: Basic Books, 1964), and *Community and Society*, trans. Charles P. Loomis (East Lansing, Mich.: Michigan State University Press, 1957).
13. Emile Durkheim, *The Division of Labor in Society*, trans. George Simpson (New York: The Free Press, 1933), and *Suicide*, trans. John A. Spaulding and George Simpson, ed. George Simpson (New York: The Free Press, 1951).
14. Howard Paul Becker, *Through Values to Social Interpretations* (Durham, N.C.: Duke University Press, 1950), chap. 5.
15. Max Weber, *The Theory of Social and Economic Organization*, trans. Alexander Morell Henderson (1920; reprint, New York: The Free Press, 1997); also see H.H. Gerth and C. Wright Mills, *From Max Weber: Essays in Sociology* (New York: Oxford University Press, 1946), p. 155.

16. McFaul, *The Future of Peace and Justice*, chap. 11.
17. For an insightful discussion of these changes, see Samuel P. Huntington, *The Clash of Civilizations and the Remaking of World Order* (New York: Simon & Schuster, 1996).
18. Edward Cornish, *Futuring: The Exploration of the Future* (Bethesda, Md.: World Future Society, 2004), chap. 2.
19. Daniel Bell, *The Coming of Post-Industrial Society: A Venture in Social Forecasting* (New York: Basic Books, 1973).
20. Francis Fukuyama, *Our Posthuman Future: Consequences of the Bio-Technology Revolution* (New York: Farrar, Straus and Giroux, 2002).
21. Thomas M. Georges, *Digital Soul: Intelligent Machines and Human Values* (Boulder: Colo.: Westview Press, 2003).
22. Ray Kurzweil, *The Age of Spiritual Machines: When Computers Exceed Human Intelligence* (New York: Viking, 1999).
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CHAPTER 3

Pushing the Polarities

It is clear that the future of the global village will unfold within the broad framework of modernization as it progresses toward the next stage of human evolution. Irrespective of the direction this might take, one primary factor will characterize the process: constant change. No doubt, the non-repeatable experiences of the 20th century, as well as events since then, have set the stage for what lies ahead during the rest of the 21st century and beyond. Amidst the flux of constant change, it is fitting to ask whether enduring structures of any kind exist at all. The answer is yes. If so, then where can they be found? The answer: in human nature.

No matter what turns the global village takes in the future or what surprises lie ahead (and no doubt there will be many), they will all take place within the broad boundaries that are inherent in human nature. This means that human nature is not infinitely elastic. Throughout the long trek of human evolution and the dynamic discoveries that have transformed Pre-modern to Modern society, all changes have occurred within a fixed but flexible framework—without exception. While this sounds contradictory or even oversimplified given the heterogeneous cultures that are increasingly intermixing in the global village, it is not. While change is always present, so are the outer edges of human nature within which it occurs.

An ancient aphorism expresses this paradox very well: “The more things change the more they stay the same.” Does this mean that after all is said and done the universe really is permanently set in place, and therefore static, contrary to the theme of constant change that the previous chapter emphasized? The answer is no. It means merely that any satisfactory

solution to the myriad problems that modernization produces must filter through the sieve of human nature and the outer boundaries that it encompasses.

In particular, there are four sets of boundaries within which constant change occurs. They can best be described as four permanent polarities that are inherent in the human condition. They are:

1. free-will-determinism
2. material-spiritual
3. good-evil
4. individual-society

The rest of this chapter elaborates on these four polarities. Then after this has been set in place, the remainder of the book will incorporate them chapter by chapter.

The first polarity centers on whether human thought and behavior is the result of free will or whether it is determined by prior causes over which an individual has no control. As will be discussed in chapters 4 and 5, this issue lies at the heart of science, which has exerted such an enormous influence in the shaping of the Modern world, and where an understanding of the independently operating laws of nature appears to leave little room for Freedom. The issue of how modernization has affected perceptions of the relationship between free will and determinism will be examined in depth.

The next polarity, which will be discussed in chapter 6, involves the connection between the spiritual and material dimensions of human experience. This second polarity extends directly from the first. It is the task of modern science to explore the material or physical forces that drive the universe. The second polarity looks below the surface of materiality in search of a deeper spirituality out of which the physical universe emerged. As will be shown, the descriptions of the relationship between the two sides of this polarity are many and varied throughout the world's religions.

The third polarity is discussed in chapter 7 and focuses on the extent to which humans are inherently good or evil. Like the second polarity, which is connected to the first, the third extends from the second. The third polarity examines whether or not common values lie at the center of the world's diverse religious and philosophical perspectives. As will become clear, the search for shared values is inseparably related to questions regarding whether human beings are inherently good or evil. Answers to these questions are also tied to the ways in which society organizes itself to satisfy both economic and political needs.

The fourth polarity spotlights the tension that exists between the individual and society. The issue of Freedom in the emerging global village is tied directly to how this tension is balanced. During the past two centuries, one of the world's major trends has been toward the individual end of the

polarity. This will become clear in chapters 8 and 9, which concentrate on the major economic and political movements of the Modern world. The final chapter will summarize how these combined polarities intersect and connect to Truth and Freedom as the modernization process moves forward to help shape the future of the emerging global village. Before proceeding to the next chapter, which explores the impact of modern science, the rest of this chapter provides a brief overview of the four polarities.

FREE-WILL-DETERMINISM

The first polarity associated with human nature involves disputes over whether human behavior results from the exercise of free will or deterministic causes. There is much at stake in how this polarity is perceived. If an individual is not free to decide on a particular course of action among many possibilities in any given situation, then he or she cannot be held morally or legally responsible for the consequences that follow from that decision. Individuals either have the capacity for choice or they do not. In addition, no society accepts or could function for long under the assumption that free will does not exist, although all societies acknowledge that external circumstances can affect the choices that people make.

Examples of the free-will–determinism polarity come readily to mind, especially in situations in which one person is involved in the loss of another person's life. The first case deals with premeditated murder with planned malice of forethought; the second with domestic abuse, where one spouse kills another while under emotional stress; and a third with automobile accidents in which the driver of one car unintentionally brings about the death of another person.

In these three examples, the extent to which the individuals who cause death can be held morally or legally responsible depends entirely on the degree to which they are perceived to have willed it. Clearly, in the first case, the murderer willfully chooses to kill someone and plans it in advance. In the second situation, killing occurs on the spot and under conditions of temporary emotional stress related to spousal abuse. In the third case, the driver of the car accidentally kills someone. He or she has no willful intention to harm the other person and does not act out of temporary anger.

In law, these three cases are defined differently as first-degree murder, second-degree murder, and manslaughter. In morality, they are also not viewed to be the same. The crucial factor that determines why these three cases are treated differently is free will. In the first case, the murderer kills intentionally. In the two remaining cases, the persons who bring about death are influenced by mitigating circumstances that lessen, by varying degrees, their legal and moral culpability. If individuals do not possess free will and if all actions are determined by antecedent causes over which no person has control, then all efforts to determine gradations of moral or

legal responsibility are fruitless. People do not kill. Instead, antecedent causes and circumstances do.

A lively debate has existed for centuries over where the free-will side of this polarity ends and the determinism side begins. Despite the ambiguities that surround this polarity, no little effort has been spent championing one side or the other. The Premodern Greeks debated it, theologians of every era argued over predestination as God's divine plan, and modern scholars have turned to the findings of science to make their case. Two of the best-known modern proponents of determinism and free will are behavioral psychologist B.F. Skinner (1904–1990) and philosopher Jean-Paul Sartre (1905–1980), respectively.

Skinner is perhaps the best-known modern psychologist who stands firmly on the side of determinism. As a result of his extensive laboratory studies of animal behavior, he came to the conclusion that all internal mental processes can be reduced to external behavioral reinforcements, not only for animals but humans as well. The assumption that there exists an independent entity called the human mind that is capable of exercising choice is false. This means that free will does not exist and any belief in human dignity that is closely coupled to it is an illusion. Human behavior of any kind is determined only by external factors of one kind or another.

Skinner's view of humanity is straightforward. The behavior of all biological beings can be reduced to the mechanical laws of cause and effect, which Behavioral Psychologists like Skinner and his followers call the contingencies of reinforcement. The following sentence makes this clear: "A self is a repertoire of behavior appropriate to a given set of contingencies." The "autonomous man" does not exist. In Skinner's words, "Freedom and dignity . . . are the possessions of the autonomous man of traditional theory" and are not necessary for a modern view of human behavior.

The goal of behavioral psychology is to "strip away the functions previously assigned to autonomous man and transfer them one by one to the controlling environment." The supposedly subjective self that possesses an independent will that rests on Freedom can be reduced to a being that is the product of external contingencies. According to Skinner, "The identity conferred upon a self arises from the contingencies responsible for the behavior." In other words, "Man is a machine in the sense that he is a complex system behaving in lawful ways."¹ In the Modern world, Skinner stands second to none in his denunciation of the free-will end of the polarity. All that is left is determinism.

Compared to Skinner, Sartre occupies the opposite end. One of Sartre's most famous phrases is that human beings are "condemned to be free."² Unlike Skinner, who asserted that all behavior is absolutely determined by antecedent contingencies, Sartre held that human beings live under the condition of absolute freedom. Both Skinner and Sartre were atheists. In the absence of belief in God or a divine purpose that permeates the universe, Skinner adopted a Newtonian-type mechanistic view of the universe, hypothesizing that only external factors cause human behavior.

Unlike Skinner, however, Sartre did not reduce behavior to a modern mechanical model of cause and effect. Instead, he reasoned that in lieu of belief in a God who reveals universal moral mandates that humanity is commanded to follow, individuals are free to make whatever commitments they want. Freedom of choice is humanity's most fundamental existential condition. To fall back on determinism to explain why the world works as it does is a cop-out. Mechanistic explanations are merely forms of denial that result in the failure to accept personal responsibility for the world as it is or as it ought to be. In short, for Sartre, contrary to Skinner, there is no escape from Freedom.³

Thus, it is clear that the free-will–determinism debate that began in the ancient world continues into the Modern era. As will be demonstrated in the next two chapters, modern science has had a profound impact on the direction that this debate has taken. The next polarity that characterizes the human condition is material-spiritual.

MATERIAL-SPIRITUAL

The second polarity involves the material and the spiritual dimensions of human experience. This polarity is anchored in the universal recognition that all humans are beings with material bodies that are subject to nature's laws. That is to say, no person exists as a disembodied spirit. To be human is to have a biochemical-physical body. As biological beings, every individual enters historical existence through the process of procreation—either through sexual intercourse, as in the vast majority of cases, or artificially through some type of modern reproductive technology such as *in vitro* fertilization. By whatever means, once born, every human being, along with every other creature on the earth, lives for a finite period of time and then dies. Nothing mortal avoids the cycle of life and death.

In order to survive as bodied beings within the natural world, evolution has provided humanity with the five senses of touch, taste, sight, smell, and hearing. Every person accesses the external world through these senses, which register information as subjective images in the brain. It is on the basis of these images that each person presumes the existence of a corresponding objective reality outside of the mind. This means that most people take for granted that the internal knowledge they have of the external material universe is reliable. Or, simply stated, the world is believed to be as it is perceived to be. The daily routines of life could not go forward without this taken-for-granted understanding. No human endeavor would continue for long if everyone believed their subjective perceptions of objective reality were false.

It is at this point that the material-spiritual polarity pushes to the surface. Beginning with the assumption that the material universe exists outside of the mind's awareness of it, sooner or later someone will ask: Does something exist beyond the material universe? If so, what is it? And what is its relationship to the material universe? These questions, which appear

in all cultures and which can be assumed to stem from an innate human desire for knowledge, serve as a bridge between perceptions of the material universe and speculation regarding whether or not a spiritual power greater than the universe exists.

Once these questions appear, there are only two ways to respond: No, there is no power greater than the material universe—that is, materiality is the ultimate reality of the universe; or, yes, there is a spiritual power greater than the material universe, a power that brought the material universe into existence and that is determining its destiny. Anyone who answers these questions in the first way is a materialist who assumes that the physical universe is like a big machine that is controlled by impersonal laws of cause and effect. There is no need to introduce any power beyond natural law to explain the operations of the material universe, its origin, or its ultimate fate.

The second way of answering these questions applies to the world's major religions and their followers, who do not share a materialist's limited outlook. Contrary to a spiritless and purely mechanistic view of the cosmos, billions of religious believers presuppose that some kind of intangible spiritual reality lies embedded within the tangible material universe experienced through the five senses. Their differences lie primarily in how they define the nature of this spiritual reality and the manner in which it manifests itself.

This means that every person's perception of the material-spiritual polarity begins by experiencing the objective world that filters through the five senses and becomes recorded as subjective images in the mind. From this point forward, materialists and members of the world's religions begin to separate as they seek answers to questions related to the origin and destiny of the physical universe. Materialists conclude that there is nothing beyond materiality, whereas the vast majority of religious devotees assume that an ultimate spiritual power lies hidden beneath the surface of the physical universe it created.

One of the most significant divisions within Modern society exists between the devoted followers of the world's religions as well as between those who adhere to some form of spirituality and those who embrace a materialist view of the universe. Much of the world's conflict during the past two decades has been driven by inter-religious hostilities that are associated with the globalization process. In addition, the mighty transformations that modern science introduced into the world during the past two centuries have given rise to a lively and ongoing science versus religion debate that emerged with the decline of Premodernist views of the universe.

As will be discussed in depth in chapters 6 and 10, some of the most aggressive movements for social change in the 21st century are anchored in Premodern religious traditions whose followers are struggling to cope with the spread of modernization, secularization, and westernization. The

future of Truth and Freedom in the emerging global village hinges on the outcome of these struggles, which, in turn, are tied directly to the next polarity of good and evil.

GOOD-EVIL

From the time of ancient China and early Greece, countless observers from diverse cultures have pondered one of humanity's most basic and opposing tendencies. On one hand, individuals in all walks of life and across time demonstrate an extraordinary capacity for love, kindness, and self-sacrifice on behalf of others. From Confucius to Mother Teresa, there is no shortage of saintly examples. On the other hand, as history has demonstrated all too often, hatred as well as kindness flows from the wellspring of human nature, or metaphorically speaking, from the human heart. From the development of ancient torture techniques to the barbarism of the Nazi Holocaust, history is littered with unspeakable human cruelties.

For centuries, insightful writers in dissimilar settings have speculated about the origin of the capacity for both good and evil, which is tied directly to the issue of human values that will be discussed in chapter 7. Starting with Confucius (c. 551–479 B.C.E.), the ancient Chinese sages presumed that the potential for either of these tendencies was present at the moment of birth. For Confucius, the key to overcoming the chaos of warring states that characterized his historical era lay in educating individuals to become virtuous citizens. Confucius's ideas led to the creation of a Confucian School. The followers of this school shared their founder's conviction that education in virtue was the basis for creating the inner and outer harmonies that they believed gave rise to social stability. At the same time, they disagreed over the conditions of human nature that for centuries made virtue education an essential mainstay in Chinese society.

In particular, two members of the Confucian School, Mencius (c. 371–287 B.C.E.) and his contemporary, Hsun Tzu (c. 297–238 B.C.E.), held opposite views. Mencius believed that humans are born innately good. The purpose of education is to bring this goodness out of them. For Hsun Tzu, humans are born inherently bad, and the purpose of education is to repress the tendency to harm others. Either way, the opposing members of the Confucian School of social learning were keenly aware that the potential for both good and evil is inherent in human nature.⁴ Irrespective of the various methods each advocated, the collective goal of these Pre-modern writers was to curtail evil and cultivate the values they believed enhanced personal and social well-being.

Centuries later, paralleling the ancient Chinese experience, writers during the European Enlightenment engaged in similar disputes over the origin of the good-evil polarity in human nature. As a result of the spirited debates that occurred in the 17th and 18th centuries, these authors laid the foundation for many of the major economic and political ideas that have

become integral to the modernization process and that will be discussed extensively in chapters 8 and 9. Although they clashed on many issues, and at times vehemently so, they framed their perspectives around conjectures about an original state of nature from which society has deviated. Their disagreements relate directly to their dissimilar assumptions about the good or evil inclinations that individuals possess in this primal, pre-social state of being.

Whether or not the Enlightenment thinkers actually believed in the reality of an original state of nature in which individuals lived alone prior to the formation of social groups is a matter of dispute. However, what is not disputable is that their notions of an original state of nature provided them with a starting point for developing their contrary claims about how society ought to be organized as well as what values ought to take precedence in achieving this goal. As a conceptual tool, the idea of an original state of nature gave them a framework for probing deeply into the motives that give rise to human behavior and for proposing moral, economic, and political arrangements that would be an extension of this primal condition.

One of the Enlightenment's most gifted writers, Thomas Hobbes (1588–1679), argued that the original state of nature is not a very happy place. In dramatic fashion, Hobbes portrayed life in the original state of nature as “solitary, poor, nasty, brutish and short.” Every individual carves out a pathway in the world through aggressive self-interest. It is “every man, against every man,” even if this means doing harm, unto death if necessary, to others.

Thus, the original state of nature is anarchic, a place where everyone seeks to dominate everyone else. Evil becomes pervasive as self-centered individuals compete for mastery and control. In short, this state of nature is best described as a “war of all against all.”⁵ Hobbes did not intend that his dismal description of the state of nature be an end in itself. Instead, he used it as a starting point for proposing a social contract form of centralized government that will be examined in chapter 9.

In opposition to Hobbes's pessimistic view of the original state of nature, other Enlightenment philosophers argued differently. In particular, two stand out above the rest. They are John Locke (1632–1704) and Jean-Jacques Rousseau (1712–1778), both of whom will be discussed again in chapter 9. Both men's expressed ideas have exerted major influence in the development of modern democracy. Like Hobbes, they proposed social contract theories of political governance. However, contrary to Hobbes, who held that human nature is inherently evil, both Locke and Rousseau assumed that it is innately good.

For Locke, in the pre-social state of nature, every person enjoys specific inalienable rights, especially the right to life, liberty, and property. The two dominant traits individuals express in this original condition are rationality and goodness toward each other. All people are perfectly free to order their lives as they see fit. In Locke's words, “The state of nature has a

law to govern it, which obligates every one; and reason, which is that law, teaches all mankind who will but consult it that, being all equal and independent, no one ought to harm another in his life, health, liberty, or possessions.”⁶

If the world were perfect, the peace and harmony that exists in this idyllic state of nature would last forever. However, as Locke was keenly aware, the world is not perfect. In order to protect against the possibility that some scoundrel might seize control and abolish everyone’s natural rights, individuals must join together and create a social contract that protects the peace, safety, and general goodness that they enjoy in the original state of nature. Thus, unlike Hobbes, who held that a social contract gives individuals a legal framework for controlling evil, Locke believed the opposite. A social contract provides people with a political structure for fostering the good.

Jean-Jacques Rousseau shared many of Locke’s ideas, even though his views of the social contract differed in significant ways. One phrase in particular captures the essence of Rousseau’s view of the human situation in the original state of nature and later in society: “Man is born free but is everywhere in chains.”⁷ Individuals are born inherently harmless. Rousseau’s image of the noble savage captures well his view of an innate state of unspoiled purity and goodness that exists prior to living with others in society, the source of all evil. Nature makes human beings happy, whereas society makes them miserable. In the state of nature, where goodness prevails, individuals pursue their own satisfaction, but not at the expense of others. Why? For Rousseau the answer is simple: because they are sickened when they see the suffering of others.⁸

With the development of society, a few greedy individuals ruin life in the state of nature for the generous many. In Rousseau’s mind, God created an ample amount of material resources for all to share; but through the spirit of avarice, a small number of selfish people set out to amass most of the world’s wealth for themselves with the consequence of impoverishing everyone else. Rousseau was vehement in his denunciation of this corrupt pattern of wealth-driven inequality. He believed that social corruption based on greed could be reversed through the formation of a democratic social contract that would reflect the general will of the populace, a key idea that inspired the French Revolution of 1789.

Thus, from Premodern China to the Modern Enlightenment, disagreements about the “nature of human nature,” especially in regard to innate good and evil tendencies out of which human values emerge, have existed for centuries. Optimists share the view that human nature is inherently good, whereas pessimists proclaim it is evil. This duality, which history demonstrates is deeply embedded in the human condition, is closely connected to the next polarity, which involves the relationship of the individual to society, where the call for Freedom has emerged as one of the Modern world’s core values.

INDIVIDUAL-SOCIETY

The relationship between the individual and society is the last of the four polar tensions that this chapter examines. Like the others, it appears throughout history in complex and multi-layered ways. Every individual's identity embodies both unique personality traits as well as characteristics that reflect the groups of which he or she is a member—ranging all the way from the family to the nation or even beyond to the world as a whole.

As researchers from the social and behavioral sciences began to study human behavior through the methods of modern science, they quickly divided over whether the individual takes priority over society or vice versa. Sociologists like Emile Durkheim, whose ideas were examined in the last chapter, come down strongly on the side of society.⁹ For Durkheim, society is a reality *sui generis*, which means that it cannot be reduced to either the psychological or biological levels of human nature. Society has a life of its own because its members possess a common consciousness that consists of shared norms, institutional arrangements, and collective perceptions that unite its individual members in group solidarity.

Furthermore, no newborn baby comes equipped at birth with innate values or perceptions of reality. In order to grow into adulthood, every child starts the trek through life by internalizing society's norms, language, and collective images. For Durkheim, the most compelling evidence of the power that society exerts over its separate members is this: no society can maintain itself beyond one generation if it does not successfully socialize individual members into its culture and patterned role expectations. Simply stated, it is through the process of childhood socialization that every society guarantees its intergenerational continuity. This means that every individual is an extension, a mirror image, so to speak, of the society into which he or she is born. It is through this process that any given society survives for the long haul of history. Thus, from the perspective of the individual-society polarity, for Durkheim society takes precedence over the individual.

Modern psychology stands on the other side of the individual-society polarity. Unlike sociology, which emphasizes the common patterns that all individuals share, psychology focuses on how individuals differ according to their dissimilar personality traits and the diverse perceptions and actions related to the social pressures around them. Starting with Freud, psychology offers an alternative to sociology by stressing the impact of unconscious factors on the collective consciousness (i.e., social norms). In addition, nothing in society would every change if every individual were merely a cookie-cutter replica of the culture.

There is no doubt that everyone becomes a member of a society through the process of socialization. At the same time, modern psychology contributes to balancing the individual-society polarity in the direction of the individual. Over the past 150 years, psychologists have expanded their sci-

entific investigations into many arenas. These include studying the stages of human development, how personality differences emerge and affect behavior, where normal behavior ends and abnormal or violent conduct begins, how the brain's biochemistry influences behavior, and strategies for aiding the mentally ill, among others. Whereas sociology focuses on the society end of the individual-society tension, psychology centers on the many causes that contribute to individual differences.

With psychology lining up on one side and sociology on the other, the question arises regarding how the two can be connected. The modern field of social psychology is the bridge that links together these two sides of the polarity. While many notable contributors have provided insights into how the individual relates to society and vice versa, one name stands at the top of the list: George Herbert Mead (1863–1931).¹⁰ His contribution lies principally in providing a framework that accounts for the unique aspects of each individual's personality as well as the collective norms that help shape it. Mead calls every person a "social self." He begins by assuming that (1) no individual lives unattached from social groups and that (2) within all social groups each individual possesses a unique identity. His creativity lies in how he describes the intersection of these two sides of selfhood.

In Mead's view, every person has a self-identity that consists of two integrated parts. He calls one part the "I" and the other the "Me." Human selfhood cannot be reduced to either one part or the other, but at all times the conscious mind holds the two in tension. The Me side of the social self emerges when an individual internalizes shared group norms, which Mead called the "Generalized Other." This is consistent with Durkheim's assertion that society is a reality *sui generis*. The I part of the social self consists of each person's unique sense of self.

As each individual grows from birth to adulthood, the I part that sits at the center of consciousness becomes more self-initiating, and is the source of self-transcendence. That is to say, the social self increasingly develops its own identity through the capacity to think critically about the Generalized Other or group norms of the society into which he or she is born. This is consistent with modern psychology's view of personality diversity and the stages of development that lead to adulthood. The tension between the I and the Me persists throughout the length of each person's lifetime.

For Mead, everyone shapes his or her individual identity against the backdrop of internalized social norms. The variations that exist between individuals emerge as a result of the I-Me interplay that goes on inside both the unconscious and conscious levels of the mind of each social self as he or she grows into adulthood. This means that no mature person can be reduced to either a mirror image of social norms or to an atomistic self that is severed from them. Throughout an entire span of life, each person lives in the unresolved tension that exists between the individual (I) and social (Me) aspects of selfhood. The net result is that Mead offers a conceptual framework that integrates the individual-society polarity while preserving

the integrity of both sides. The self cannot be reduced to society, and society is more than just a loose conglomeration of isolated individuals.

Mead's view of the social self opens the door to a deeper understanding of one of the principal sources of social change that was discussed extensively in the previous chapter. Even as society shapes individuals, individuals in turn shape society. Change never occurs apart from a specific social context, and all individual- or group-initiated attempts to change society do not take place within a cultural, political, or economic vacuum. Societies change because individuals and groups change them, and individuals and groups change because the I side of the social self becomes dissatisfied with the Me, that is, the way in which society is organized and into which the self is socialized.

The ramifications of Mead's ideas are endless. At a minimum, they provide a foundation for understanding why human evolution is open-ended rather than static. They offer insight into why society has shifted from Pre-modernism to Modernism as well as for comprehending the industrial, cybernetic, and molecular stages that the modernization process has produced and continues to produce. Mead's perception of the dynamic tension that exists between the I and the Me sides of the social self is a useful starting point for analyzing the cultural, political, and economic changes that have occurred over the past several centuries. When individual and social dissatisfaction exist at any point in time, social change is most likely right around the corner.

Finally, there is never a final resolution to one side or the other of the ongoing tension that exists in the individual-society polarity. It will persist as long as humanity continues to exist. At the same time, the two sides are not equally balanced. By employing Mead's dynamic view of the social self, it is easy to understand why one of the dominant long-term trends of Modern society has been the rise of individualism and the call for greater Freedom in every arena of social life. As will be discussed in depth in chapters 8 and 9, which deal with modern economics and politics, the norm of individualism and the pursuit of Freedom have become two of the most significant hallmarks of the emerging global village.

CONCLUSION

Several conclusions can be drawn from the above description of the outer boundaries of the four basic polarities that are inherent within human nature. To start, while each one of the four can be examined apart from the others, in actuality they intersect in a variety of ways. To illustrate, the two polarities of free-will-determinism and good-evil are closely coupled. If individuals possess the capacity to consider alternative ways to react in any given situation prior to doing so, then they are free to choose the option that they believe will result in the greatest amount of good.

Lying and stealing are two prime examples. During the course of a lifetime, every person confronts circumstances wherein lying and stealing are

tempting possibilities. Deception and theft are common, everyday occurrences. From the perspective of the above polarities, telling the truth is morally superior to lying unless lying can be justified under special circumstances such as protecting innocent children from harm. Because truth-telling is always an act of the will, it integrates the freedom and goodness ends of two of the four dualities inherent in human nature.

No doubt, determinists would argue that what appears to be an action based on free will is merely the result of antecedent cause-and-effect relationships over which an individual has no control. Contrary to taken-for-granted assumptions about how individuals operate in the world, determinists reject the idea that people have any real capacity to consider alternative courses of action and then to choose willfully the one that they prefer over the others. According to Skinner, so-called free will is determined by unseen external conditions of reinforcement. It is an illusion.

In opposition, Sartre, who disagrees vehemently with Skinner, stands on the Freedom side of the free-will–determinism polarity. Without free will, humans have no capacity for choice, which in turn means that the very idea of human responsibility evaporates. For Sartre, there is no escape from Freedom. If Freedom does not exist, the perception that a society can decide to set up its own legal structures by which it regulates acceptable and unacceptable behavior is also an illusion. If all thought and behavior is merely the result of antecedent causes over which humans have no control, then the very idea that individuals are free to weigh alternative perceptions of Truth and to live by their preferences disappears. As the proponents of Freedom have often pointed out to determinists, even the belief that no Freedom exists is itself an alternative among other beliefs, one of which is that Freedom does exist. Or, stated differently, belief in determinism is a choice that is freely made from among other possible choices that include nondeterminism.

In addition to free-will–determinism and good-evil, the tension that exists between the material and spiritual aspects of human experience comprises another of humanity's most important polarities. While no human being can survive in history apart from possessing a material body, the vast majority of persons around the world are not philosophical materialists. Instead they embrace one of life's most challenging endeavors, namely, to discover the deepest meaning possible through the pursuit of spiritual goals, which includes belief in the existence of a power that is greater than the physical universe and at the same time lies hidden within it. It is one of the major trends within the emerging global village that the once-isolated followers of the world's religions are fanning out around the world and interacting with each other at a level never before seen in human history.

Finally, as will be described in later chapters, another of the world's major trends is pushing the polarity of individual-society in the direction of the individual. As social and behavioral scientists continue their investigations of the ways in which society influences the individual, and vice

versa, Mead's perception that all persons possess a unique inner self and seek to express themselves against the backdrop of their internalized social norms provides a model for grasping the dynamic nature of social change. As modernization moves the future forward into the next stage of human evolution, there is little doubt that the individual-society polarity will be sitting at the center of the process. The chapters that follow will explore in depth the role that all four of these polarities will play in science, religion, morality, economics, and politics as the future unfolds throughout the 21st century and beyond.

NOTES

1. All quotations are taken from B. F. Skinner, *Beyond Freedom and Dignity* (New York: Bantam Books, 1972), pp. 22–23, 121, 192. Also see B. F. Skinner, *Walden Two* (Upper Saddle River, N.J.: Prentice-Hall, 1976).
2. Jean-Paul Sartre, "Existentialism," in *Existentialism and Human Emotions*, trans. Bernard Frechtman (New York: Citadel Press, 1957), p. 23.
3. Jean-Paul Sartre's most extensive philosophical inquiry into the nature of human existence and freedom is *Being and Nothingness*, trans. Hazel E. Barnes (New York: Philosophical Library, 1956).
4. William A. Young, *The World's Religions: Worldviews and Contemporary Issues*, 2nd ed. (Upper Saddle River, N.J.: Pearson Education, 2005), pp. 125–127.
5. Thomas Hobbes, *Leviathan*, ed. C. B. Macpherson (1651; reprint, New York: Penguin Books, 1981), chap. 13.
6. John Locke, *The Second Treatise of Government*, ed. Thomas R. Peardon (New York: Bobbs-Merrill, 1952), p. 5, para. 6.
7. Jean-Jacques Rousseau, *The Social Contract* (New York: Dutton, 1946), p. 1.
8. Rousseau expressed many of his ideas about the inequalities that exist in nature and society in "Discourse on the Origin and Foundations of Inequality among Men," in *On the Social Contract*, trans. Donald A. Cress (Indianapolis: Hackett Publishing Company, 1983).
9. See Gertrud Lenzer, ed., *August Comte: Essential Writings* (New York: Harper, 1997); and Emile Durkheim, *The Elementary Forms of the Religious Life*, trans. Karen E. Fields (New York: The Free Press, 1995).
10. George Herbert Mead, *Mind, Self, and Society* (Chicago: University of Chicago Press, 1967).

CHAPTER 4

The Butterfly

The preceding three chapters laid the foundation for the remainder of this book. As described in chapter 2, one of the main driving forces that led to the transition from Premodern to Modern society was the emergence of rational-empirical methods for examining and discovering the operating laws of nature. Modern scientific findings and their technological applications continue to drive the modernization process as it progresses through multiple stages—from industrial to advanced industrial to cybernetic/information to molecular/genetic. Chapter 3 examined the outer boundaries of the free-will–determinism tension that is one of the four permanent polarities of human nature through which the ongoing modernization process will move as the global village grows.

This chapter combines these two aspects of chapters 2 and 3. In particular, the continuing pursuit of modern science to discover the hidden realities of the physical universe gives rise to a question that is vital to the future of Truth and Freedom in the global village: Do the actual discoveries of the hard physical sciences give more credibility to the free will or determinism sides of the polarity? As was discussed in chapter 3, Skinner, the determinist, and Sartre, the advocate for Freedom, stand on opposite ends of the continuum. Skinner drew his inference from laboratory studies of animals. The existentialist philosopher Sartre came to a contrary conclusion by reflecting on the nature of moral responsibility. Which side does modern science support?

Although pursuing an answer to this question seems simple enough, it is made more difficult by the way in which the subjective mind comprehends objective reality. As indicated in chapter 3, human understanding

of the external world is mediated through the five senses. This means that all knowledge is subjective, even though most people assume their mental images correspond to objective reality. In addition, human knowledge is incomplete and imperfect, because it is not possible for the finite brain to absorb the totality of all there is to know. It knows only in part. In the final analysis, the human mind is highly selective in what it takes from the surrounding environment and in how it processes this information into knowledge.

At the same time, not having perfect knowledge of objective reality is not the same as having no knowledge. With a few exceptions, modern science has developed methods that are designed to reinforce the mind's conviction that its mental images match up to the perceptions of the outside world that filter through the five senses. These include making observations that can be measured and repeated for verification by groups of scientists working in any given area of research. It involves laboratory experiments, mathematical simulations, ongoing analysis and comparison of multiple findings, and so on. In addition, science presumes that valid, nonintuitive conclusions can be drawn without the perceptions of the five senses. The theories and technologies of modern science exist not only (1) to aid in the discovery of the laws of nature, but (2) to foster widespread belief in their truthfulness via repeated experimentation and verification.

There is no shortage of examples to illustrate this point. As a result of the discoveries of modern science, Premodern perceptions of the origin and nature of the physical universe and humanity's place in it have changed dramatically. In the Modern world, the Big Bang theory has replaced the Premodern biblical creation story, even though creationists continue their struggle to defend it. Darwin's modern view of human evolution through natural selection and survival of the fittest has superseded the Premodern divine command theory, even though religious fundamentalists reject it because of their staunch belief in the inerrancy of Christian Scripture.

Despite these ongoing disagreements, there is virtually no serious debate on one particular modern discovery: the earth travels around the sun and not vice versa, as was believed to be universally true during the Premodern period. From the spectacular pictures taken by the Hubble telescope of the vast cosmos with its billions of galaxies and billions of stars within each galaxy to the micro images of the atom's complex inner operations, modern science has revolutionized and changed forever humanity's understanding of the physical reality that lies outside of the mind's awareness of it.

Another way to say this is that in the transition from the Premodern to the Modern world, perceptions of what the world is really like, how it came to be, how it operates, and where it might be going did not remain static. Furthermore, the modern view of the cosmos changes constantly as scientists continue their ceaseless quest to uncover how the natural laws of the physical universe function so that they no longer remain hidden beneath the surface of ordinary experience. While complete objectivity is not pos-

sible and many subjective elements shape what scientists see as well as the choice of the technical tools they use for seeing it, modern science nonetheless moves forward under the assumption that it is possible to make steady progress, unpredictably and agonizingly slow at times, in discovering the Truth of the physical universe.

The remainder of this chapter will focus on how the Premodern world understood nature and how this changed as the Modern world emerged. In particular, it will seek to answer whether modern science's discoveries of the truths of the physical universe support one side of the free-will–determinism polarity more than the other.

PREMODERN

Like so many other areas involved in the ongoing quest for Truth, early efforts to comprehend how nature operates had their origins in the bygone eras of the Premodern world. In ancient civilizations such as Babylonia and Egypt, all knowledge was attributed to heavenly revelation, that is, as a gift from the gods to humankind. The deities who inhabited the heavens made their earthly appearances and dispensed their wisdom and understanding about the origin and nature of the universe. From the start, humans have sought meaning and looked for purposeful answers to questions related to the dawning and destiny of the universe.

According to one author, primal religious speculation in particular led to the development of all kinds of stories about how the world came into existence—ranging from the earth and sky emerging out of a cosmic egg to the abrupt and dramatic birth of the cosmos by divine fiat.¹ Creation stories took the form of imaginative myths that gave credit to the spectacular supernatural beings that brought into existence the sky, earth, and everything above or below them. As an expression of the divine purpose that permeates the universe, most of these colorful religious accounts of the origins of the cosmos give humanity a prominent place as caretakers of the created order.

In addition to the mythological creation traditions that emerged among many of the world's oldest religions, Greek Ionian philosophers in the sixth century B.C.E. took to thinking about the nature of the universe differently. In a very real sense, they shifted their speculation about the origin of the cosmos away from heaven and back to earth. They used reason rather than revelation to probe below the surface of everyday subjective impressions in order to discover the truth about how the physical world and the natural laws that govern it function at the most basic level of external reality. Even though many of their ideas have been superseded by discoveries that depend on more sophisticated methods of observation and measurement, they helped to pave the way for the rise of modern science.

For anyone acquainted with ancient Greece's pre-Socratic philosophers, the names of Thales, Anaximenes, and Heraclitus, among others, are well

known because of their search for the primordial stuff or essence hidden beneath the mental images of everyday impressions. For Thales it was water, for Anaximenes air, and for Heraclitus fire. Others debated whether it was material, immaterial, or spiritual. Amidst a flood of fanciful conjectures, two philosophers in particular left legacies that link directly to the ideas and methods of modern science, especially modern physics. They are Democritus and Pythagoras.

Even though he did not have access to modern cyclotrons, Democritus (b. 460 B.C.E.) was the first to propose that the entire universe is tied together by invisible particles called atoms, which swirl in the void of space. As a school of thought, atomism understood the diverse objects of the universe to be comprised of atoms that were combined in different quantities and qualities—as in the case of surfaces that are smooth, rough, wrinkled, and so on. For Democritus, all atoms have existed for eternity. They have no beginning or end. They are the same in substance and are never annihilated. Atoms collide to form the different objects of the world. When the objects die and decompose, the remaining atoms reunite to form new and different objects that in turn repeat the endless cycle of composition, decomposition, and recomposition.² The connection between modern physics and Democritus's understanding of the underlying atomic structure of the universe is both direct and obvious.

The second of the ancient Greek philosophers to leave a mark on modern science is Pythagoras (c. 530 B.C.E.). As a mystic who taught his students to believe in the immortality of the soul and reincarnation, he was convinced that, despite the surface impression that the diverse objects of the universe are disconnected from each other, they are in fact harmoniously integrated and balanced, like music. Above all else, he held that this structured harmony is discernable through mathematics theorems such as his own. His insight has withstood the test of time. Like Democritus's theory of atoms, Pythagoras's view that there exists an underlying mathematical orderliness in the universe has been amply demonstrated in the Modern world through the achievements of both engineers and physicists like Isaac Newton and others, as will be discussed later in this chapter.

More than any of the other ancient post-Socratic Greek philosophers, it was Aristotle (384–322 B.C.E.) who provided the Premodern Western world with an understanding of how the physical universe operates. Even though Democritus and Pythagoras lived decades before Aristotle developed his own ideas, their influence, especially in the area of the atomic structure of the universe and its mathematical formulations, have found a more congenial home in the Modern world's comprehension of the nature of the universe.

Aristotle rejected Democritus's atomic theory of hidden particles of nature. Instead, in line with Pythagoras, he held that all matter consists of four contrasting qualities—hot, cold, wet, and dry—that join together in dual combinations to produce the universe's basic elements of earth, water,

fire, and air. When these four elements link together in varying amounts, they congeal into different types of matter. Matter changes its form and features when the elements of the universe dissolve and reunite in new arrangements.³

In addition, Aristotle integrated his understanding of how the physical universe operates with a metaphysical view of why it works that way. As was briefly discussed in chapter 2, Aristotle's concept of teleology, or purpose, was central to his notions of both the how and the why of nature. Like his contemporaries, Aristotle accepted an earth-centered view of the universe. Unlike Democritus, who believed that atoms have existed for all eternity without beginning or end, Aristotle held the opposite. Since the human mind understands that everything is caused by something that precedes it, Aristotle reasoned that the cosmos must have been created by a first cause, that is, an Uncaused Cause. He called this first cause the Unmoved Mover—his term for God. In the process of creation, the Unmoved Mover assigned to every object in the universe a specific purpose for its existence.

Modern science has rejected two of Aristotle's key concepts: his views of nature and teleology. Democritus's idea of the atomic structure of the cosmos is closer to the modern physics' viewpoint than is Aristotle's. In addition, the focus of modern science is not teleology but causality. Stated simply, modern science focuses on the how, not the why. This does not mean that "why" questions are no longer important or have ceased to be asked. The contrary is true, and the proponents of various world religions and philosophies continue to vigorously debate the "why" issues. While many integrate scientific ideas and discoveries into their arguments, as is the case for advocates of intelligent design, on the whole, modern science focuses mainly on determining how the universe works in all its complexity rather than why it exists in the first place.

For example, when asked how the heart functions, a cardiologist can easily provide a detailed description of its internal operations or produce a facsimile model showing its four chambers and the direction of blood flow. However, in order to explain why the heart exists as it does, the cardiologist's answer would have to turn in a different direction. He or she might say, "That's how God created it," "That's how it evolved over millions of years of evolution, natural selection, and survival of the fittest," or simply, "I don't know. My job is to keep it healthy, and I have some solid scientific evidence on how to do this. I leave the question of 'why' to theologians and philosophers." In other words, the cardiologist's primary concern as a physician is causality, not teleology.

Despite the Modern world's rejection of his physical speculations and the separation of physics from metaphysics, Aristotle's rational-empirical approach to the study of nature, as contrasted with the philosophical speculations of Platonism and various Neoplatonic offshoots, has left a permanent legacy. Even though it took many centuries for the spirit of

induction to become transformed into the empirical-mathematical methods of modern science, Aristotle can be rightly credited with helping to lay the foundation.

After the collapse of the Roman Empire in 410 c.e., the pathway from Premodern to Modern approaches to the study of nature wound through both medieval Christendom and Islamic civilization. Reason continued to play a central role in the development of images and descriptions of objects in the physical universe and their interconnections. The primary difference between Premodern and Modern approaches to science is not the acceptance or rejection of reason as an indispensable tool for discerning nature's secrets. This means that it is incorrect to conclude that Premodern science was pre-rational, or at worst irrational, and that Modern science is rational. Rather, the difference lies in how reason was employed to draw conclusions about the external reality of the physical universe that exists outside of mental impressions of it.

In the Premodern civilizations of both medieval Christendom and Islam, reason became coupled with theology, philosophy, and religious authority. As Europe slid into an extended period that historians have often unfairly called the Dark Ages, major centers of learning emerged in the Muslim world. These centers translated ancient Greco-Roman writings into Arabic, thus providing the basis for continuing scientific advancements. Because of these translations, the vast reservoir of knowledge that originated in ancient Greece and Rome was preserved for posterity.

Then, following the Crusades in the 12th and 13th centuries, international travel and scholarly contacts brought back to Europe the ancient writings that Muslims had safeguarded for centuries. As a result, the newly emerging European universities experienced a surge of intellectual activity prompted in part by scholarly translations of ancient texts from Arabic to Latin and then Greek. Gradually, medieval scholars began integrating the rediscovered ideas of ancient Greece and Rome with the theological doctrines of the Catholic Church and the ideas of Muslim writers.

More than anyone else, it was Thomas Aquinas (1225–1274 c.e.) who provided the late-medieval Catholic Church with an intellectual synthesis that has served for centuries as an official theology. Aquinas wrote his massive, multi-volume work, *Summa Theologiae*,⁴ from the perspective of Aristotle's ancient metaphysics and science. He held that knowledge was based on intuitive tenets and the authority of the Church. Following Aristotle, he rejected Democritus's idea that the world is merely a collection of diverse objects comprised of atoms. In the terms of the science of his day, Aquinas accepted that humanity is the creation of God's divine command and that the earth is the center of the universe.

In addition, like Aristotle, Aquinas asserted that the material universe is the basic substance that underlies all objects, including human and non-human bodies. This primary substance combines with different accidental or secondary attributes such as weight, color, light, dark, physical form, and

so on. The diversity of objects that comprise the universe consists merely of substance-accident combinations that appear, disappear, and reappear throughout the cycle of life. In short, the rediscovery of Aristotle's ancient writings provided medievalists like Aquinas with a description of the physical cosmos that exists outside of human perception of it.

While Aquinas's writings provided the medieval mind with the most rationally sophisticated account of God's universe, in a very real sense, his writings marked the beginning of the end of the Premodern view of how the universe works. Even as medieval science reached its peak under Aquinas, it was his 13th-century contemporary, Roger Bacon (b. 1210 C.E.), who opened the door to the modern scientific approach to the study of nature. In time, starting with Bacon and continuing through the Enlightenment several centuries later, this new way of thinking pushed out the old.

MODERN

Roger Bacon's point of view was simple in its conception, but challenging in its implementation. While Bacon made few scientific discoveries that have withstood the test of time, his significance lies in the fact that he gave the world a new orientation to the physical world. Prior to Bacon, the notion that science should adopt an experimental approach to the study of nature did not exist. Little doubt exists that Aquinas took medieval scholasticism to the highest level of intellectual achievement through his extensive theological synthesis of Judeo-Christian and Greco-Roman ideas. At the same time, at their weakest point, the writings of these schoolmen of medieval Europe, as they were called, contained little that prepared them for the explosive scientific revolution that stood just over the horizon and that ushered in the Modern age.

Contrary to the spirit of the times, Bacon was convinced that experimentation alone was the key to scientific certainty. According to one author, "Bacon read all the authors he could reach, Arabic (probably the Latin translations) as well as Greek, but instead of accepting the facts and inferences of natural knowledge from Scripture, the Holy Father, the Arabians, or Aristotle, Bacon told the world that the only way to verify their statements was to observe and experiment."⁵ In addition, he recognized that the study of mathematics was essential to providing scientists with a language through which they could communicate their experimental discoveries. Key to this was the development of instrumentation, including time pieces, for accurate measurements and observations.

Like many new ideas, it took time for Bacon's view to be accepted. Even though Aquinas and Bacon lived during the same century, it was Aquinas's perspective that dominated Christendom's Premodern scientific understanding of the operations of the universe. Then, for the next several centuries, from the start of the Renaissance through the Enlightenment, Bacon's

method gradually gained ground over all other approaches. Out of the philosophical and theological rationalism of Premodern Europe arose the experimental rationalism of Modern science.

Despite resistance from many Christendom clerics whose convictions rested on Aquinas's views, slowly but surely the modern empirical approach to investigating the physical universe began to bear fruit. Like many other major social change movements, modern science arose through small increments that eventually congealed into a larger pattern that revolutionized how humanity understood the origins and nature of the cosmos. Starting in the 16th century C.E., roughly 300 years after Roger Bacon first advocated the study of nature through direct observation, the collective discoveries and associated hypotheses and explanations of several scientists rendered the momentum toward modern science irreversible.

The names of Copernicus (1474–1543), Francis Bacon (1561–1626, not to be confused with his predecessor, Roger Bacon), Kepler (1571–1630), Galileo (1564–1642), and Descartes (1596–1650), among others, come readily to mind. Together they provided the scientific foundation on which Isaac Newton (1642–1727) developed his theory of the universal law of gravitation. In combination, Newton's scientific forerunners provided the astronomical observations and mathematical formulations that laid the foundation for his research and eventual 1687 publication of one of the world's most influential scientific books ever written, *Principia*, in which he set forth his revolutionary ideas.

Newton's contribution on gravity led to several new conclusions about how the physical universe operates. The mathematical laws pertaining to terrestrial bodies also apply to nonterrestrial ones. His observations supported Kepler's earlier perceptions of the planets' elliptical orbits around the sun. He provided an explanation for the daily ebb and flow of the earth's tides. Above all else, he demonstrated that the gravitational forces that operate on the earth apply to the moon, sun, and the universe in its entirety.

Contrary to Aquinas, who held that the starry canopy above the atmosphere was incorruptible and different from the earthly imperfections down below, Newton demonstrated that the known observations of the entire system of heavenly bodies reflect a single and huge mathematical harmony that can be described according to his three laws of motion, which synthesized all previous observations. He also invented the mathematical branch of calculus to describe the underlying mathematical regularity of the observed cosmos.

In other words, modern science's approach to the study of the universe, which culminated in the writings of Newton and which described natural laws through mathematical formulations, proved to be more successful than Aquinas's method at explaining and verifying how the entire universe operates. It is one of history's ironies that Newton confirmed a theory about the harmonious, music-like integration of the cosmos, which

had been set forth centuries earlier by the ancient Greek philosopher Pythagoras. It was Pythagoras who provided the Premodern world with the philosophical speculation, and it was Newton who gave the Modern world observational and mathematical confirmation.

In addition, the impact of Newton did not stop at the doorstep of the physical sciences. It rippled into other areas as well, especially philosophy and theology. In particular, Newton's influence helped redefine the two-fold topics of Truth and Freedom. On the Truth side, Newton's formulations replaced the ancient Aristotelian and biblical views of the universe that Aquinas had synthesized so superbly during the height of the Middle Ages in the 13th century. In simple terms, Newton projected an image of the cosmos as a big machine that functions according to its own innate natural laws of cause and effect. Despite this modern, vastly different description of the universe, Aquinas, like his predecessors, held that the majesty of the universe manifests the glory of the Creator.

At the same time, this new portrayal of the Truth of the physical world played havoc with the concepts of Freedom and God. The reason is clear. If the universe exists as a machine whose parts operate mechanically through self-sustaining impersonal laws that require no outside intervention or manipulation, then the need for Freedom as an explanatory factor for why anything happens disappears. Even if God created the cosmos, there is no need to refer to God as an explanation for its continuation. The universe can sustain itself.

What follows from an image of a self-sustaining, mechanical universe is also clear: It takes only a small step of the imagination to go from eliminating Freedom to eliminating God. Newton's view of the world undermined another of Aristotle's philosophical concepts, the Unmoved Mover or Uncaused Cause, as well as the Judeo-Christian assumption that God created the universe through divine command. In a mechanical universe sustained through self-perpetuating laws of nature, many in the Modern world have embraced the position that it is just as credible to presuppose that these laws have always existed, as the ancient Greek philosopher Democritus believed about atoms, as it is to assume the existence of an uncreated cosmic creator. For others, like Aristotle and Aquinas, who stand on the opposite side, there must be a higher power that is the creative source of these laws.

Despite these disagreements among individual scientists over the existence of a creator God, the methodology of modern science, as Roger Bacon first envisioned it and as it is practiced in the Modern world, does not require a God hypothesis in order for scientists to successfully examine and discover the laws of nature through observation and experimentation. This does not mean that modern science and belief in a creator-sustainer God are incompatible or that someday science will eliminate religion. The continuing existence of multiple religious communities among the vast majority of the world's population is ample evidence of the

persistent human need for spiritual purpose.⁶ In truth, science and religion can and will continue to coexist amicably, because they focus on different concerns. The pursuit of truthful knowledge is not incompatible with the quest for a meaningful faith. More will be said about this in later chapters.

In addition to stimulating new ways to think about Truth, Freedom, and God, Newton's influence reverberated into other domains as well. Aristotle had connected his idea of teleology to the concept of causality in order to explain how objects in the universe are related to each other. His viewpoint dominated the Premodern world for centuries until it was replaced by the modern conception of causality. In order to explain the causal connections among objects in the universe according to his teleological assumptions, Aristotle used four concepts of causality: material, formal, efficient, and final.

The material cause of an object is what gives it its specific property, such as the wood in an easel. Or stated differently, wood is the material cause of the easel. The formal cause is the principle or law that causes something to be, such as the idea of an artist that results in a painting. The efficient cause refers to a person or event that actually causes something to happen, such as an artist using a brush to put paint on a canvas. Lastly, the final cause is the purpose, or *telos*, for why something exists, such as a painting that depicts some object or person.⁷

Newton changed all this by eliminating the need for three of Aristotle's four concepts of causality: material, formal, and final. From the perspective of the Newtonian worldview that defines the cosmos as a big machine that runs according to its own impersonal and self-governing natural laws, the only connections that modern scientists investigate are what Aristotle called efficient causes, that is, those natural connections that tie the universe together through complex relationships of cause and effect. The goal of modern science is to describe and explain how the physical, conceptual, and behavioral world functions according to causal relationships that can be observed, discovered, and reaffirmed through repeated experiments, and/or described mathematically, as in the case of the universal law of gravitation.

Questions related to whether or not there is a God who created and perhaps even sustains this extraordinarily complex universe belong in the domains of theology and philosophy. Even though Newton, along with his predecessors, assumed that the hidden wonders of the world pointed to the handiwork of a creator, it was only a matter of time before the perception of the world as a self-sustaining machine would be separated from the God hypothesis. Like Democritus of ancient Greece, many modern thinkers reason that there is no need to posit the existence of a deity to take care of the universe when the universe appears to be able to take care of itself.

If God can be known, it is through faith and not through descriptive science, which endeavors only to explain the natural laws that gave rise

to and that govern the universe. This does not mean that the marvels and majesty of the universe do not imply the existence of a creator God that transcends or infuses the cosmos. Since the time of Aristotle, philosophers and theologians have speculated about the relationship of God (or metaphysics) to nature (or physics). It was Aristotle who first articulated a natural theology, in the form of cosmological and teleological arguments (later adopted by Aquinas), that is grounded in the operations and purposes of nature as he defined them. Centuries later, Anselm and Descartes added the ontological argument based on reason alone.⁸ The modern debate over whether the orderliness of the universe and the infinitesimal probabilities that it should exist as it does imply the existence of an “intelligent designer” is a current continuation of these ancient natural theology arguments.

In truth, however, the God hypothesis has been on the defensive since the start of the Newtonian era. Simply stated, since Newton, no inherent need exists in modern science to appeal to God to explain the operations of the universe. As Roger Bacon first noted, knowledge of the natural laws of the physical world, as complex, intricate, and tightly interwoven as they might be, ought to come from empirical observation and experimentation. This does not mean that there is not an intelligent designer behind the natural order. It means merely that it takes a leap of faith to go from observation, experimentation, and mathematical formulations of nature’s laws to the belief that there is a supernatural or spiritual force that brought the cosmos into existence—whether through the hatching of an egg, the Dao, the demiurge, divine emanations, divine command, or simply through the Big Bang.

Another way of saying this is that Newton’s scientific Truth changed humanity’s perception of the world. If the universe is merely a big machine that operates automatically through natural laws, then Freedom and God are not necessary. Simply stated, belief in determinism is the philosophical implication of the Newtonian worldview. In light of this outcome, one main question arises: Have the discoveries of post-Newtonian scientists reinforced or modified Newtonian determinacy? The remainder of this chapter focuses on answering this question.

As modern scientists advanced their investigations within the Newtonian framework, they discovered that in many instances the laws of nature do not appear to operate according to strictly deterministic formulas like the mathematical equations that define the universal law of gravitation that Newton articulated. Instead, some natural phenomena can be described more aptly as indeterminate and unpredictable. In quantum physics, the Heisenberg uncertainty principle, which was formulated collectively by scientists such as Max Planck, Niels Bohr, and others, is the most widely known statement of this fact.

Newton’s classical formulations calculate the precise location and momentum of an object as it exists and moves in space and time. These

arrangements and changing motions, like the ebb and flow of oceanic tides, are governed mechanically and predictably through mathematically discernable gravitational forces, laws of interactions, and laws of motion. In a word, they are determinate. The uncertainty principle that Heisenberg and others developed in the early decades of the 20th century grew out of research that focused not on what happens to large objects and their changing relationships in time and space but on the analysis of extremely small atomic particles whose location and momentum cannot be known with certainty, but only statistical probability.

The studies that began with Heisenberg and his colleagues and that continue to this day involve what is called, in the popular vernacular, "atom smashing." This entails sending subatomic particles in opposite directions through circular accelerators several miles in diameter until they reach maximum velocity. Then they are smashed together. The goal of the research is to determine what happens to the atomic nucleus, including protons, neutrons, and other particles, when atoms collide at incredibly high speed.

Unlike astronomers, who can use the mathematical formulations of classical mechanics to predict the precise location, momentum, and changes that exist among the moons that circle planets and the planets that circle the sun, nuclear physicists cannot predict with certainty the resultant position, momentum, and trajectory of particles that circle atoms when they collide at high rates of speed. Scientists can predict only with statistical probability, not mathematical certainty, what is likely to happen. Thus, one of the major differences between classical and quantum physics is that the former is built on determinacy, while the latter—aided by the discoveries of Heisenberg—is based on the principle of uncertainty.

The significance of the work of Heisenberg and others cannot be overstated, because it opens the door to the consideration of two new questions. First, if determinacy implies the absence of Freedom, then does uncertainty or indeterminacy imply the opposite, that is, the existence of Freedom? Second, how is this to be understood?

At this point, it becomes necessary to clarify the concept of Freedom. On the one hand, if the idea of Freedom applies to the way people make choices, then it refers to the human capacity to think in advance about the advantages and disadvantages of alternative courses of action in any given situation before choosing the one that seems to be the best. In other words, for humans Freedom normally means the capacity to think and choose. Whether or not individuals really have such a capacity has been widely debated in the behavioral and human sciences and in philosophy during the past few decades, and this will be discussed in depth in the next chapter.

In this chapter, the idea of Freedom pertains to other areas, particularly the physical sciences in which Newtonians examine the movements of heavenly bodies and nuclear scientists track the responses of neutrons and

protons in the collision of subatomic particles. For Newton, determinacy exists above in the movement of the stars, whereas for Heisenberg, uncertainty exists below in the behavior of atoms and subatomic particles. In the shift from Newton to Heisenberg—that is, from determinacy to indeterminacy—only one question remains. How does the uncertainty principle connect to the concept of Freedom?

At this point, it is necessary to distinguish between Freedom as the capacity for choice and Freedom as statistical probability according to quantum mechanics. Statistical probability refers to the idea that the outcome of any given set of circumstances cannot be known in advance with 100 percent certainty. The reason for this is that the condition of uncertainty, namely Freedom, is ontological. That is to say, at the level of subatomic particles, Freedom, understood as indeterminacy, although small in scale, is built into the universe.

At the same time, this does not mean that protons and neutrons have the capacity for choice in the way normally applied to human beings. Subatomic particles do not think in advance and decide how they are going to react to the conditions of nuclear behavior. In this sense, they are still subject to the objective laws of nature. However, these laws operate indeterminately, that is, statistically or probabilistically, and not deterministically in the sense that the outcome can be known in advance with absolute certainty.

This does not mean that the subjective image of an objective world that is governed by determinate laws as defined by Newton has been replaced by a vision of the universe driven by indeterminate probabilities as understood by Heisenberg. Rather, it appears as though determinism and indeterminism coexist in the universe even though the scale of indeterminism in subatomic research is not a factor in everyday life. There are areas where determinism is more applicable than indeterminism and other areas where the opposite appears to be the case, as the differences between Newton and Heisenberg reveal. The real issue is where each is most applicable and where they coexist or interact in some way. As will be described in the next chapter, this is especially significant in research on the biochemistry of the brain and how this relates to human consciousness and the capacity for thought, choice, and behavior.

After Heisenberg's studies on subatomic particles led to establishing the principle of uncertainty, other scientists also began identifying parallel patterns in their own areas of research. While it is not possible to describe all these endeavors, two in particular stand out. The first covers the concept of chaos and the second the nature of complex systems. The remainder of this chapter will focus on these two areas and will then conclude with a summary of how both determinacy and indeterminacy as viewed through the lens of modern science connect to Truth and Freedom.

The most significant implication of the indeterminacy principle is how it alters perceptions of what the subjective mind can say with certainty

about how the objective universe operates. In a deterministic world, it is possible to make highly accurate predictions about the relationship of objects to each other and how they change in space and time. For example, the success associated with sending astronauts into outer space would not be possible without calculating in precise mathematical terms the trajectory of a spaceship as it travels from the earth to the moon and back again. This is the world of Newton.

On the other hand, predicting who will win the next World Cup in the earth's most popular sport of soccer cannot be determined with mathematical precision. It can be known only statistically. The saying, "On any given day any team can beat any other team," summarizes well that the outcome of sporting events cannot be known in advance with complete certainty, unless, of course, they are rigged. On an honest playing field, projections of outcomes can be known only in terms of probability. This is the world of Heisenberg, which applies to lotteries, insurance companies' actuarial tables, the number and location of hurricanes that will hit the coastal regions of the United States in any given year, and so on. In other words, indeterminism is wired into the universe, even at the most basic level of physical reality.

This can be demonstrated through one of humanity's oldest aspirations. In the quest to improve prediction and control of the weather, the field of meteorology has made enormous scientific advancements with computer models that simulate highly complex systems that correlate multiple atmospheric factors. The goal of this research is to gain foreknowledge of how, when, and in what ways weather will change. In attempting to identify ways to improve forecasting, in 1972, Edward Lorenz, faculty member at Massachusetts Institute of Technology, began using sophisticated computer programs in his studies. In the process, he discovered that making even the smallest adjustments in the numerical values of his many variables led to huge changes in projected weather conditions.

After experimenting with multiple trial runs and calculations, he concluded that the capacity to make long-term forecasts could not be done with a high degree of accuracy. He surmised that this is because the earth's atmospheric system is so extraordinarily complex that it is impossible to derive precise projections beyond two weeks, even with the most advanced technology. This discovery led Lorenz to coin the term "butterfly effect,"⁹ which refers to the possibility that an isolated event in one part of the world could elicit through a complex chain of undetectable causes and correlations an unexpected effect in a distant location. He mused over the likelihood that a butterfly flapping its wings in Brazil might cause a tornado in Texas. His goal was not to answer this question but to advance awareness of the earth's extraordinary complexity.

In effect, Lorenz expanded the uncertainty principle from Heisenberg's work on micro subatomic particles to research on the earth's macro weather systems. In the process, he contributed to the growing recognition that the physical universe is so complex that the human mind may never

be able to grasp completely all its intricate relationships, even with the most sophisticated high-speed, multi-variable computer programs and technology. Another way to say this is that the butterfly effect refers to the notion that humanity's epistemic capacities are too innately limited to comprehend with total determinacy the ontological intricacies, operations, and changes that occur in the universe.¹⁰

Another name for the butterfly effect is chaos theory. In one sense, the image of chaos is misleading, because it implies the absence of order or stable structures anywhere in the cosmos. However, if this were so, then no continuity of anything would exist from moment to moment. This is, of course, not the case, and ordinary experiences reveal the recurrence of many patterns, such as the daily trek of the earth around the sun, the growth of flowers in the spring, and the ongoing love of parents for their children, among many others. The word "chaos" in chaos theory refers to the fact that, over time, small and undetectable changes in complex systems can lead to large differences in outcomes, just as predicted by the butterfly effect and indeterminacy. In short, the three ideas—chaos theory, the butterfly effect, and indeterminacy—are identical.

In addition, another important issue presses to the surface: how to differentiate between words such as chance, randomness, causality, correlation, and Freedom. All five terms are connected to the concept of indeterminacy. From the side of human knowledge, the idea of indeterminacy implies that Freedom is innately structured into all aspects of existence, including the hardest of physical and biochemical processes. However, from the perspective of modern science, indeterminacy does not imply that complex systems are exempt, or free, from the laws of nature. Indeterminate systems, as complex and chaotic as they appear to be, are still orderly structures. That is to say, they operate by interactive relationships that are subject to mathematical regularities, even though they take the form of probability and not certainty.

This means that the changing patterns and outcomes of chaotic systems are regulated by randomness or chance. According to ordinary dictionary definitions, these terms are used interchangeably. Chance is an "unexpected or random element of existence." When an event occurs at random, it happens "in such a way that each member of a set has an equal chance of being chosen."¹¹ Randomness or chance is also called "luck." In a lottery, every number has an equal chance of being chosen in any given draw. The order in which numbers appear is by chance or at random. Anyone who has ever won a lottery has experienced how chance or randomness functions in a complex chaotic system—that is, by luck of the draw.

The concepts of causation and correlation also operate in both determinate and indeterminate systems. Causation, which normally applies to determinate systems, refers to one-to-one or invariant relationships that occur among objects within the system. For example, when a billiards player shoots one ball into another, the second ball reacts according to strict laws of physics in terms of speed, spin, and trajectory. On the other

hand, the concept of correlation applies to intricate systems in which relationships among reciprocal objects can be understood only in terms of probable outcomes.

For example, correlation, not causation, applies to the outcomes of both Heisenberg's and Lorenz's studies on subatomic particles and global weather patterns, respectively. Unlike billiard balls, atoms and weather operate randomly (that is, by chance) and statistically (that is, through correlations and probabilities) because they are indeterminate or chaotic systems that create the butterfly effect of unpredictability.

Now add choice to the mix and the correlations and probable outcomes of complex human systems become even more indeterminate. Who alive in the year 1900 would have been able to predict that the 20th century would witness two world wars, a worldwide economic depression, the start and collapse of the Cold War, the rise and fall of Nazi Germany and the Soviet Union, space travel, several moon landings, the end of the colonial era, and the progressive mapping of the human genome? No doubt, the future of the 21st century and beyond holds many surprises of equal or greater magnitude.

Why should this be so? The answer lies in the nature of human choice and its effect on the future. According to one author, "The butterfly effect probably operates even more decisively in human systems than it does in weather systems, because a human has a much broader scope of activity and because social systems are probably more sensitive than weather systems."¹² Human communities are by their very nature chaotic systems, not in the sense that no stable structures exist, but rather from the perspective of their complexity and of the endless number of ways in which even seemingly inconsequential decisions can lead to highly consequential outcomes. The potential exists at every point in time for any individual to alter the present by acting in ways that will steer the future in unanticipated directions. Initial low-probability occurrences ripple through a complex set of connections and create huge effects—for both good and ill.

Examples come readily to mind. The inner spiritual insights that inspired Buddha, Jesus, and Muhammad during moments of quiet meditation led to the development of religious and ethical movements that helped shape entire civilizations and that currently claim the allegiance of nearly four billion people (2.3 billion Christians, 1.3 billion Muslims, and about 350 million Buddhists) or 61 percent of the earth's six-and-a-half billion inhabitants. The rise to political power during the early 1930s of a disgruntled Austrian painter named Adolph Hitler led to the deaths of over 60 million people as a result of the Nazi-instigated World War II that ended in 1945. The September 11, 2001 attack on New York's World Trade Center has shaped the unfolding of the 21st century in previously unforeseen directions. The list goes on.

In addition, any approach to investigating the indeterminate relationships that govern a single system can be expanded to encompass multiple

systems that overlap and interact with each other. While any system, like the body's skeletal structure, might appear to exist in isolation, in reality no system exists apart from other systems. According to Lorenz's image of the butterfly effect, in some way or another, everything from the atoms and genes that comprise the human body to the universe in its entirety is connected to everything else, even though it is virtually impossible to trace all the countless connections and complex correlations.

One author in particular has described the various levels of subsystems that combine to make the earth a single integrated system, starting with cells and moving upward in step-like fashion to more complex structures like organs, whole organisms like lions, bigger groups like families, even larger organizations like schools, and finally entire societies like nations that collaborate at the international level.¹³

In terms of the butterfly effect, the countless number of small, moderate, and large changes that occur constantly at all levels in every subsystem eventually reverberate throughout the entire system in which some small changes more than others lead to systemic alterations. Given the enormous complexity associated with every possible connection both within and across all subsystems, it is easy to see why the human ability to make accurate forecasts is so limited and why predictions, especially for the long term, have ended up being more wrong than right.¹⁴ Such is the magnitude and degree of the earth's indeterminacy, which ranges from the behavior of atomic particles to the unfolding future of the world system called the global village.

Before drawing a conclusion regarding how Truth and Freedom are connected to the billions of butterfly effect events that occur constantly across the cosmos, one additional question calls for consideration. Where do Albert Einstein's special and general principles of relativity fit on the determinism-indeterminism continuum? Little doubt exists that this early 20th-century discovery is one of greatest human achievements in the history of modern science. Prior to Einstein's reflections on the relationship of energy and mass to the speed of light, Newton's view dominated 18th- and 19th-century perceptions about absolute space and time. Einstein's innovations changed this.

In 1905, at the age of 26, Einstein set forth the basic idea of special relativity, which he later expanded to a theory of general relativity. One consequence of Einstein's work was the discovery that $E = mc^2$, where E equals energy in Joules, m is mass in kilograms, and c (squared) is the speed of light in meters per second. Contrary to Newton, who believed that there is no upper limit to the speed of bodies in motion, in Einstein's system, the speed of light, or 186,000 miles per second, is the maximum velocity at which any object can travel through space and time.

Also, contrary to Newton's system regarding absolute mass and energy, Einstein maintained that when any moving object reaches about 20 percent of the speed of light (37,000 miles per second), both its mass

and corresponding energy begin to increase. As the mass of an object increases, it takes more energy to accelerate it up to 186,000 miles per second (the speed of light), beyond which it cannot travel any faster.

By 1915, Einstein had worked out the mathematical formulation that applies to objects or bodies subject to all kinds of motion, including those affected by the universal law of gravitation as Newton articulated it in 1687.¹⁵ More than two centuries after Newton, Einstein's relativity research focused on the very high speeds of objects moving through space and time, rates of speed that cannot be observed in everyday life. In short, Einstein's ideas built on and absorbed those of Newton by connecting relative changes in both the mass and energy of moving objects as they travel at varying velocities.

Where does Einstein belong on the determinacy-indeterminacy continuum? Like Newton's universal law of gravitation, Einstein's theories of special and general relativity are determinate, because the relationships they describe are subject to precise mathematical calculations. Energy is related invariantly to both mass and velocity. That is to say, the link between energy, mass, and velocity is constant. The concept of chance or randomness does not apply to the theory of relativity. Instead, increases in the velocity of any object in motion up to the maximum point of the speed of light are connected predictably and without statistical variance to changes in mass and energy.

Thus, within the broad range of incredibly complex connections that infuse and sustain the universe, Einstein stands with Newton and not with Heisenberg or Lorenz. This, of course, does not resolve the challenge of identifying where determinate relationships end and indeterminate ones begin. It simply places Einstein on the determinacy end of the spectrum. What the work of all these extraordinary modern scientists reveals is that both indeterminacy and determinacy are innately structured into the physical universe.

CONCLUSION

The above discussion leads to several key conclusions. To begin, in the Premodern world, the quest to understand the nature and origin of the cosmos, as it exists outside of the mind's subjective impressions of it, is first evident in the widely varying myths central to the world's diverse religions. As an alternative to religious myth, the early Ionian Greek philosophers employed reason as the principal means for speculating about the primal stuff or universal essence that remains hidden beneath the surface of everyday impressions. Democritus's emphasis on atoms and Pythagoras's stress on the mathematical unity and harmony of the universe parallel many of the discoveries of modern science.

Among the ancient Greeks, Aristotle's perceptions dominated Premodern scientific thinking for centuries prior to the Western Renaissance and Enlightenment. Building on Aristotle's teleological approach, in the 13th century the Christian theologian Thomas Aquinas synthesized Greco-Roman philosophy with Judeo-Christian religion. This grandiose intellectual vision of the cosmos and its origins can rightly be called the culmination of the Premodern view of how the physical universe came into being and operates.

Then, in the 13th century Roger Bacon, a contemporary of Aquinas, offered for the first time an alternative method that eventually led to the demise of the Premodern view of nature. Simply stated, Bacon opened the door to the rise of modern science by proposing that knowledge about the operations of the physical universe ought to be derived from direct observation and experimentation and not by examining ancient religious or philosophical texts or by appealing to external authorities. As a result of Bacon's new approach, Aristotle's view of teleology eventually was replaced by modern science's emphasis on causality. That is to say, Premodern philosophical and religious rationalism gave way to modern rational empiricism.

From Roger Bacon to the present, the long march of modern science has been well documented. In a steady stream of observations by early pioneers like Copernicus, Kepler, Galileo, Descartes, and others, the modern scientific understanding of the universe began to emerge. Building on these discoveries, Newton set forth the universal law of gravitation and three laws of motion that govern the relationships of physical objects to each other as they exist in and move through space and time. More than anyone else, it was Newton who defined the universe as a big machine that operates by its own deterministic laws of cause and effect.

Einstein's theory of relativity led to modifications of Newton's physics of time and space and of the relationship of mass to energy when objects travel through space at very high velocities of speed up to the point of maximum velocity beyond which no moving object can go—the speed of light and the structure of space-time. Einstein's theory generalized Newton's contributions while at the same time including them. Together, their discoveries reinforced a mechanistic image of the physical universe. Newton's universal law of gravitation and three laws of motion laid the groundwork, and Einstein's more advanced theory of relativity both modified and reinforced it. The relationships that exist between objects in motion, as they travel through space and time, are invariant. That is to say, they can be described with mathematical precision.

As shown above, this is not the end of the science story. The work of Heisenberg, Lorenz, and others who study complex systems and the connections between subsystems that comprise them led to a different conclusion. While Newton and Einstein have shown with mathematical certitude

that determinate or invariant connections exist at many levels throughout the universe, Heisenberg, Lorenz, and other scientists have demonstrated that there also exist at different levels many relationships that are uncertain, indeterminate, or variant. The behavior of neutrons and protons during a nuclear explosion and changes in complex weather systems cannot be explained with mathematical certainty. Instead, they can only be described in terms of statistical probability, which Lorenz labeled the butterfly effect. Even the smallest and most undetectable changes that occur on the outer edge of any given system can lead to major alterations of the entire system.

As systems and subsystems extend from single cells to global politics, they become more layered, integrated, and complex, which means that the degree of indeterminacy increases. In other words, both determinacy and indeterminacy coexist simultaneously and are built into the very structure of the universe. In the case of determinate relationships, predicting the future is relatively easier to do. However, when it comes to indeterminate ones, making future predictions is not only problematic but nearly impossible as any given system's complexity increases. The human challenge is to identify where determinate connections leave off and indeterminate ones begin, as well as how they interact, influence each other, and where outcomes can be understood only in terms of increasingly complex patterns of randomness or chance.

Lastly, one question remains. What is the implication of the relationship between determinacy and indeterminacy to the issues of Truth and Freedom? As stated earlier, the idea of Freedom is applied normally to the human capacity for choice. In any given situation, humans are free to choose what they perceive as the best course of action after considering a range of possibilities. Can it also be said that Freedom exists in nature? The answer is both "no" and "yes" depending on how the idea of Freedom is construed. On one hand, given that nature does not operate by choice but rather by natural laws, whether they be determinate or indeterminate, the answer is no. Freedom applies to humans only.

However, if Freedom is defined differently, the answer is yes. According to Heisenberg's research on atoms and Lorenz's study of weather systems, indeterminacy is inherent in the physical universe. In many areas, the operations of nature are not confined to the constraints of determinate laws like the universal law of gravitation, the three laws of motion, or the special and general theories of relativity. Clearly, chance, randomness, and probability are an innate part of nature. This means that at many levels the physical universe follows its own indeterminate pathway of probabilities. This is what it means to say that nature has Freedom.

Thus, in the seemingly determinate physical universe described by Newton and Einstein, there are countless butterflies—everywhere. When the concept of indeterminacy or Freedom is applied to human systems, even more butterflies abound. It is the connection between Freedom and the human mind that is the focus of the next chapter.

NOTES

1. Moojan Momen, *The Phenomenon of Religion: A Thematic Approach* (Oxford: Oneworld Publications, 1999), pp. 207–211.
2. Democritus left no writings of his own. Knowledge of him comes mainly through Aristotle, the Athenian philosopher Epicurus (341–270 B.C.E.), and the Roman poet Lucretius (98–55 B.C.E.).
3. William Cecil Dampier, *A History of Science and Its Relations with Philosophy and Religion*, 4th ed. (Cambridge: Cambridge University Press, 1979), p. 33.
4. Thomas Aquinas, “Summa Theologica,” in *Basic Writings of Saint Thomas Aquinas*, ed. Anton C. Pegis (New York: Random House, 1945).
5. Dampier, *A History of Science and Its Relations with Philosophy and Religion*, p. 90.
6. Thomas R. McFaul, *The Future of Peace and Justice in the Global Village: The Role of the World Religions in the Twenty-first Century* (Westport, Conn.: Praeger, 2006).
7. Aristotle, *Metaphysics*, trans. Hugh Tredennick (Cambridge, Mass.: Harvard University Press, 1933).
8. Momen, *The Phenomenon of Religion*, pp. 190–191.
9. Edward Lorenz, “Predictability: Does the Flap of a Butterfly’s Wings in Brazil Set off a Tornado in Texas?” (paper presented at The American Association for the Advancement of Science, Washington, D.C., December 29, 1972).
10. For an excellent analysis of the limited epistemic power of the human mind to grasp the ontological complexities of nature, personality, and society, see Nicholas Rescher, *Predicting the Future: An Introduction to the Theory of Forecasting* (Albany: State University of New York Press, 1998).
11. Webster’s II New Riverside Dictionary, rev. ed., s.v. “chance, random.”
12. Edward Cornish, *Futuring—The Exploration of the Future* (Bethesda, Md.: World Future Society, 2004), p. 60.
13. James G. Miller, *Living Systems* (New York: McGraw-Hill, 1978).
14. See Laura Lee, *Bad Predictions* (Rochester, Mich.: Elsewhere Press, 2000); Nicholas Rescher, *Predicting the Future*; and Steven P. Schnaars, *Megamistakes: Forecasting and the Myth of Rapid Technological Change* (New York: The Free Press, 1989).
15. For an elaboration of Einstein’s theory of relativity, see Henry Margenau, *Open Vistas: Philosophical Perspectives of Modern Science* (New Haven, Conn.: Yale University Press, 1961), pp. 77–101, and Paul Thagard, *Conceptual Revolutions* (Princeton, N.J.: Princeton University Press, 1992), pp. 203–224.

CHAPTER 5

Roaming Around in the House

The last chapter focused on modern science's hard-core, rational-empirical approach to discovering the natural laws of the cosmos—from atoms to weather patterns to complex systems and their multilayered subsystems. In the process, it became obvious that the determinism of Newton and Einstein exists side by side with the indeterminism of Heisenberg and Lorenz, even though it remains enigmatic as to where the one stops and the other starts. This means that Freedom will play a major role in the unfolding of the future, which in turn limits substantially the human capacity to make long-term predictions.

This recognition leads to another very important question. Since all experiences of the physical universe sift through the five senses before they appear as mental images, by what process does the brain create knowledge? In other words, in the quest for Truth, how does the human mind work? There is no doubt that modern science's main achievement has been the discovery of the laws of nature that Premodern forms of scientific inquiry were unable to detect. Though they have always existed, they remained hidden below the surface of everyday experience.

In order to get deeper insight into this development, it is necessary to turn to the various views of how the brain processes impressions of the outside world and converts them into mental images. Historically, three major schools of thought—Skepticism, Idealism, and Realism—have emerged to explain the connection between the subjective mind and the objective world. The remainder of this chapter will focus on how both Premodern and Modern proponents of these schools set forth their main ideas. In addition, these schools represent a logical progression that starts with

Skepticism and ends with Realism, the alternative that most influenced the rise of modern science. In order to show this development, the following sections will first cover Skepticism, then Idealism, and lastly Realism.

SKEPTICISM

Skepticism dates from the time of the ancient Greeks. The name that stands out above the rest during this Premodern period is Pyrrho of Elis (c. 300 B.C.E.), about whom very little is known.¹ Unlike the Idealists and Realists who will be discussed later in this chapter, the ancient Skeptics disavowed all claims to Truth, whether accessible to the mind through the senses or hidden beneath appearances. They took the extreme position that it is impossible to say anything for certain about reality. For Skeptics like Pyrrho, the mind is incapable of gaining access to unconditional knowledge of objective reality. All knowledge is mediated through the senses, distinct individual experiences, and cultural differences. Subjective knowledge never mirrors objective Truth, which means that rational certainty is beyond human grasp. All mental images are merely fleeting impressions that are constantly changing.

Pyrrho held that because all knowledge is contingent on the mind's changing images, no one knows with certainty whether these images reflect reality. All knowledge is relative because it takes shape in the mind through the filters of diverse cultures and customs. This means that claims to Truth vary from person to person and society to society. All that anyone can say with confidence is that things appear to be as they are, even though this might not be the case because perceptions of things shift constantly. Because the mind cannot disembody itself, no person can objectively stand outside the mind's subjective impressions and objectively grasp the Truth. The issue for Skeptics is not whether Truth exists, but whether the human mind can know it with certainty.

Many modern voices parallel the Skepticism of the Premodern Pyrrho. One of the best known is Scottish writer David Hume (1711–1776).² Like so many other philosophers during the 18th and 19th centuries, Hume lived during the era when Newtonian physics became the accepted view of the natural world. It was an exciting time, one filled with widespread confidence that the discoveries of modern science and their application through technology would improve the human condition.

Unlike anyone else before him, Hume questioned many of the most deeply held beliefs of Western civilization, ranging from religion to human nature. In the course of his inquiries, he began to cast doubt on two of modern science's most basic assumptions: (1) that the physical world is governed by objective natural laws, and (2) that the subjective mind can know the Truth of them with certainty.

Hume used many vivid examples in aiming his Skepticism at the widely accepted Newtonian worldview. One of his colorful images involves the

relationship of billiard balls to each other. According to Hume, anyone who observes one billiard ball hitting another billiard ball will most likely conclude that the first ball causes the movement of the second ball. Assuming that the first ball travels at the same speed and always hits the second ball in the same spot, the result will always be the same. Thus, it can be said that the two balls are connected to each other through an objective law of cause and effect. In identical circumstances, the same cause leads to the same effect.

Hume offers an alternative explanation. All that can really be said with certainty about the two balls is that they are “constantly conjoined.” While this might lead to the conclusion that a causal relationship exists between them, this is not necessarily so. Although contrary to appearance, it is only through the custom of repeated experiences that the human mind infers causality. In reality, causality cannot be observed directly because all so-called experiences of external facts are sifted through the five senses. The mind does not have unmediated access to any cause and effect relationship that is assumed to exist outside the mind.

It is only through induction that the subjective mind concludes that causality exists in the objective world. This means that there is no guarantee that any conjoined sequences of events will recur automatically in the future. To illustrate this point, Hume uses an example that is common to everyone. While past experience has shown thus far without exception that the sun rises every morning, there is no guarantee that this will happen in the future. All that can be said is that, based on past experience, it is highly probable that the sun will appear again tomorrow. However, it cannot be known with absolute certainty that it will.

Hume left his mark on many of the writers who came after him. The modern school of cultural relativism is one of his direct descendants. Nowhere is this better demonstrated than in the writings of famed cultural anthropologist Margaret Mead, whose examination of non-Western cultures such as Samoa in the 1920s and 1930s became a sounding board for this early 20th-century school of thought.

After studying numerous cross-cultural differences, she concluded that what various cultures perceive as Truth is determined by their diverse patterns of cultural conditioning. There is nothing in human nature that is fixed or innate. Instead, human nature is fluid and malleable. Societies organize sense experiences differently because of their culturally conditioned dissimilarities. In Mead’s view, conceptions of reality, as well as the mental processes through which they are structured, are highly adaptable and vary according to each society’s distinctive norms.³ If Truth does exist, it cannot be known objectively.

In addition to Mead, the late 20th-century school of Postmodernism, which was described briefly in chapter 2 as a form of social critique, though not a very effective forecasting tool, stands in the philosophical stream of Skepticism. The writings of the late 20th-century postmodernist Richard

Rorty reflect Mead's earlier emphasis on cultural relativism. In its philosophical form, Postmodernism is also called historicism because its advocates remain skeptical about the possibility of going beyond historically conditioned views of reality.

For Rorty and others like Jacques Derrida and Michel Foucault, no neutral point exists from which to judge competing claims about the nature of Truth. Each society views life through the lens of its limited epistemic assumptions. Even though the desire to know the Truth drives all believers to affirm it as they see it, in the final analysis, according to Rorty, this is really "no more than conformity to the norms of the day."⁴ In the realm of knowledge, like Pyrrho, Hume, and the cultural relativists, postmodernists are Skeptics who believe that it is impossible to know the Truth with certainty.

Another form of present-day Skepticism appears in the form of cross-cultural language studies. Many modern linguists hold that syntactical and grammatical structures emerge through experience and that they differ from culture to culture. Rather than existing innately from the moment of birth (*a priori*), language emerges after experience (*a posteriori*). According to Peter Berger and Thomas Luckmann, cultural views of reality differ because "knowledge must always be knowledge from a certain position."⁵

The thinking process that occurs within each person's consciousness is a form of symbolic behavior that depends on being socialized into a particular language community. Because communities differ according to language, and language is the main filter through which humans sift sense experience and gives it structure and meaning, knowledge of objective reality is not possible. The net result of this process is that knowledge is a social construction based on how language creates it.

This means that multiple perceptions of Truth exist around the world because different societies filter their diverse experiences through dissimilar languages, which are always particular, learned, historical, and evolving, never universal, innate, static, or unchanging. Different languages are like separate pairs of glasses through which diverse cultures create dissimilar conceptions of reality. Truth is relative because there can be no neutral position from which the outside world can be apprehended. For Skeptics ranging from the Premodern Pyrrho to his Modern successors, no individual can transcend mental subjectivity in the quest for objective certainty. Languages differ, and this means that communities differ in the ways in which they receive and organize experience. Simply stated, conceptions of Truth are relative because the language systems through which the mind organizes them are also relative.

Modern cultural relativists and postmodernists are not without their critics. Wendell Bell, for example, holds that cultural relativism is a misleading doctrine, especially in light of the fact that many of the findings of early 20th-century studies of non-Western cultures like those of Margaret Mead and Bronislaw Malinowski have been reversed as a result of further

scientific research. The dissimilarities that appear in these cultures are superficial compared to deeper moral similarities that cut across all cultures.⁶

In addition, well-known linguist and philosopher Noam Chomsky buttresses Bell's criticism that scientific evidence does not support the doctrine of cultural relativism. He bases his conclusion on numerous cross-cultural studies of diverse languages and how the mind learns and uses them to construct a view of reality. According to Chomsky, universal structures or principles underpin all languages. His studies show that these principles, or parameters, consist of a universal grammar that is inherent in the human brain.

Despite their diversity, each particular language activates the universal principles or structure that Chomsky calls transformational grammar. "Thus, it may well be that the general features of language structure reflect, not so much the course of one's experience, but rather the general character of one's capacity to acquire knowledge—in the traditional sense, one's innate ideas and innate principles."⁷ Innate principles provide parameters that precede linguistic experience. In other words, the mind is not simply a passive receptacle that internalizes a culture's language.

This implies that the Skeptics' presumption that all languages are acquired exclusively through socialization is inadequate. According to Chomsky, "All human languages share deep-seated . . . linguistic universals," which "can be plausibly assumed to be an *innate mental endowment* rather than the result of learning."⁸ Chomsky's widely accepted conclusions based on cross-cultural language studies call into question one of Skepticism's most enduring presumptions: that objective knowledge is not possible because the mind is permanently locked out of the possibility of creating it. His studies open the door to the second of the three positions described in this chapter: Idealism. As will be shown in the next section, Idealism's central premise is that all individuals possess an innate mental endowment that serves as the basis for the discovery of the Truth.

IDEALISM

Idealism starts with the idea that images of reality originate in the mind and not in the objective world of matter that exists outside of it. This does not mean that the outside world does not exist. It means merely that reality can be known only through the brain's innate ideas. Plato is credited with being the first great Idealist of ancient Greece. He explained how objectivity is possible if knowledge is viewed as an extension of the mind's inner operations. Plato's view can be seen as complex and at times confusing, but its basic premises are easy to grasp.

He starts by calling the ideas that exist in the mind Forms, which he claims are innate from birth. However, Forms are not ideas in the ordinary way of thinking, because they do not come and go depending on what any given person is thinking about at any particular point in time. Rather,

the mind's Forms are eternal and unchanging; at the moment of birth they are inherent in the intellect. Plato identifies the intellect as the body's soul, which is everlasting, nonperishable, and transmigrates from body to body through successive reincarnations. The Forms *are* reality, and the mind or soul contains an infinite number of them. For Plato, the three most important eternal forms are Goodness, Beauty, and Truth.

This does not mean that objects in the outside world are not real. They are, and the mind is able to observe them. Humans are able to recognize the distinctiveness of objects external to the mind because they mirror imperfectly the perfect Forms that exist in the mind. Knowledge develops when experiences of external objects that the five senses implant on the mind activate the mind's eternal Forms. This means that for Plato, humans recognize all variety of dogs, that is, large or small, short hair or shaggy, young or old, and so on, because there exists innately within the brain a generic Form that encompasses all variations of "dog-ness," so to speak, from the inside out. Learning, therefore, is merely recalling or recollecting through the filter of the infinite Forms all of the diverse but similar finite forms that "participate" within it.⁹

Over the centuries, Plato's theory of Forms attracted many followers who devised numerous variations on his key themes. In the fourth and fifth centuries, C.E., Saint Augustine of Hippo borrowed heavily from Plato in laying down many of the key theological ideas that directed the development of Christendom in the Premodern period. For centuries thereafter, Western theologians within the Christian Church integrated various forms of Greek Idealism with Judeo-Christian Theology.

Then, in the 17th century, René Descartes (1596–1650), the founder of modern philosophy in the West, took Premodern Idealism in a new and different direction. Descartes embarked on a rational journey through the "theatre" of his mind, as he called it, in order to discover ideas that he could assert with certainty. For Descartes, this meant putting all of his subjective knowledge to the test of reason until he could arrive at the truth of things. Ultimately, this intense introspection led him to the conclusion that, at a minimum, he had to exist because it is not possible for thoughts to exist apart from a being that thinks them. Since he was the being that was thinking his thoughts, he concluded he had to "be." As a result, he penned the famous phrase: *cogito ergo sum* (I think, therefore, I am.)

Descartes brought a modern spirit of enthusiasm to the ancient school of Idealism. As a result, he attracted a group of followers who explored the implications of his ideas. As Descartes' ideas took root and spread, 18th-century British cleric and author Bishop George Berkeley (1685–1753) carried Idealism to an extreme, even to the point of absurdity. Berkeley resolved the mind-matter dilemma by asserting that matter does not even exist. While there is a perceived objective world that appears in the mind, no physical matter exists outside of it. Like the ideas that exist in the mind,

the material objects that appear to exist outside of it are only ideas that the mind projects onto the external world.

The essence of Berkeley's point of view is summarized by the phrase, *esse est percipi*, meaning "to be is to be perceived." For Berkeley, nothing can be said to exist for certain outside the mind's perception of it. Thus, only ideas in the mind are real. Objects outside the mind are merely extensions of those ideas.¹⁰ With Berkeley, Idealism becomes transformed radically from the belief that material objects of the world are only imperfect manifestations of the mind's innate Ideas or Forms (according to Plato) to the assertion that material objects exist, but only as ideas. Knowledge of the outside world is merely an extension from the inside out of the mind's internal operations. After Berkeley, Idealism had run its course. In effect, he resolved the ancient subjective-objective dilemma by asserting that the physical universe has no independent reality.

All this changed with the writings of 18th-century German scholar Immanuel Kant (1724–1804), who along with Plato and Aristotle is one of Western philosophy's most influential thinkers. In a very real sense, for the past 200 years all paths in modern philosophy have led back to Kant, because it was he who set forth a new way to think about the mind-matter dilemma. In truth, Kant did not write in response to Berkeley's seemingly absurd conclusion that matter does not exist, but rather to David Hume, who is one of the Modern world's great Skeptics, as was discussed in the previous section. What Kant offered was a new approach to understanding how the subjective mind works in relationship to comprehending external reality.

For Kant, Hume's Skepticism undermined the emerging Newtonian view, which Kant admired greatly. Specifically, it undercut the idea that the universe operates like a gigantic self-contained machine based on laws of cause and effect. Hume's writings challenged Kant's assumptions about the nature of the physical universe. This was a turning point for Kant, who later wrote that Hume's Skepticism awakened him from his "dogmatic slumbers."

More importantly, Kant believed that Hume's Skepticism undermined modern science by casting doubt that science's discoveries could be accepted with certainty. This awakening prompted Kant to search for a new way to think about how the subjective mind develops reliable knowledge of the outside world. As a result, he created an innovative approach that provided modern science with a secure epistemological foundation. Even though he rejected Hume's Skepticism, he did not embrace any of the prior forms of Idealism. Instead, he took Idealism in an entirely new direction.

At one level, Kant's ideas are easy to grasp. At another level, they appear complex because he expressed them in a dense language that makes them difficult to decipher. Kant called the mind's subjective knowledge of the objective world a "synthetic *a priori* judgment." While this language is

esoteric, the idea is not. In simple terms, Kant assumed that all persons are born with identical, innate rational categories akin to a mental sieve. These categories exist before experience. Every person is born with the same set of innate categories. This assumption is the starting point for understanding Kant's new way of thinking about how the mind works.

As all persons go through life, they encounter the empirical world that exists outside the mind. Knowledge that emerges inside the mind is the result of a synthesis between the mind's innate categories and the raw data of experience that is mediated through the five senses. This means that knowledge is an inner-rational construction based on how the mind's categories filter and arrange the raw data of sense experience.

Knowledge is not merely a one-to-one subjective impression that corresponds to the outside world like an image imprinted on a piece of paper with an ink pad. This is the fundamental Realist assumption that Kant rejected. Instead, he held that it is through the innate categories that the mind actively constructs, or as Kant would say, "constitutes," knowledge by filtering and organizing the raw data of sense experience.

Another way to state this is that knowledge does not come into existence as the result of the mind being merely a passive receptacle that absorbs images of the outside world. For Kant, the material world outside the mind really exists, but what can be known about it is subject to the way in which the mind works, that is, how the innate categories organize experiences that are mediated through the senses. To use Kant's technical jargon, knowledge is a synthetic a priori judgment.¹¹

However, this does not mean that the mind's knowledge of the external material world is arbitrary and therefore differs from person to person, as Skeptics had been asserting for centuries. Instead, for Kant, knowledge is constituted in all human beings in exactly the same way. Knowledge of the natural laws of the physical universe (for example, Newton's universal law of gravitation) is the same for everyone no matter where they live on the earth.

Since the mind filters and organizes experiences of the outside world through these universally shared categories, everyone has identical knowledge of these laws. Everyone can say with confidence that there is a universal law of gravitation as well as experience directly how it operates. Thus, for Kant, the Truth of how the physical universe operates, as it is constituted through the mind's understanding, can be known with certainty; and it can be shared universally by anyone anywhere on earth. Kant initiated a "Copernican Revolution," as he called it, in thinking about how the mind works, that is, in how to think about thinking. He added something new to Idealism, which some call Kant's third way. The mind possesses innate and therefore subjective categories but not innate Forms or ideas as Plato or Berkeley presumed.

This new way of understanding how the mind works might have undermined Idealism altogether, but it did not. Instead, Idealism spun off in

a new direction by integrating Kant's ideas. The primary example of this is found in the writings of the early 19th-century philosopher George Wilhelm Friedrich Hegel (1770–1831). Hegel was an Absolute Idealist who held that human consciousness and the world are not disconnected parts of an irresolvable mind-matter dualism. Rather, the mind and the world are inseparably integrated.

Building on Kant, Hegel took Idealism in a new direction. Reality is not simply the product of individual minds but instead of a cosmic mind or spirit that is working through human history toward an end point of total Freedom. Hegel's Kantian twist resulted in viewing the development of knowledge as movement through time, which culminates in absolute knowing. Thus, while knowledge emerges in the mind as a synthetic judgment, for Hegel the emergence of knowledge is not an activity that is restricted to the human mind alone. Instead, human knowledge emerges as the Absolute Spirit expresses itself through the human mind and drives humanity toward Truth.

Hegel held that the acquisition of knowledge occurs through a process that leads steadily in the direction of discovering greater and greater amounts of Truth. However, for Hegel, Truth does not exist in the human mind as a set of static, contradictory ideas that can never be resolved, like the subjective-objective dilemma that philosophers had been debating from the time of the ancient Greeks. Rather, Truth expands through a dialectical process that involves conflict and resolution at progressively higher levels of integration.

Hegel refers to this process as the phenomenology of the spirit.¹² By this he means that Truth grows as the collective human mind (the universal consciousness as he called it) expands and matures. Eventually, the totality of Truth will emerge; and when it does humanity will finally arrive at the end point of worldwide peace and Freedom. This will happen, according to Hegel, because God (also called Absolute Spirit) intends it to be so. Therefore, human history is nothing other than God or Truth moving through the dialectical process in order to arrive ultimately at the goal of universal Freedom.

In the Hegelian dialectic, ideas move from thesis to antithesis to synthesis.¹³ Each new synthesis becomes another thesis that gives rise to an antithesis that leads to yet another synthesis, and so on. This process repeats itself until it ends at the point of Absolute Truth and total Freedom. Through this process, the Absolute Spirit, which is God or Truth, is expanding as it moves forward in human history.

However, the unfolding of the Absolute Spirit through the dialectical process does not occur in a peaceful manner. Rather, for Hegel, Truth marches toward the day of universal Freedom on "the slaughter-bench of history." Various forms of limited consciousness, that is, thesis and antithesis, engage each other in a violent confrontation that leads to a new synthesis. For Hegel, the outcome of war always involves the emergence

of a higher consciousness of truthful ideas that combine the best ideas of the conflicting sides. Through history's mighty battles, Truth marches forward to the end point of perfect Freedom.

Thus, Kant gave Hegel a new approach to resolving the mind-matter dualism, and this served as the foundation for Hegel's Idealistic philosophy of history. In turn Hegel set the stage for Karl Marx (1818–1883), who found in Hegel's ideas an epistemological framework for his own communist worldview. It has been said of Marx that he brought Hegel down to earth by disconnecting Hegel's dialectical method from Idealism and applying it to an atheistic materialism. Or, as others have often said, Marx turned Hegel on his head. Unlike Hegel, who held that God uses the dialectical process to advance history to the end point of total Freedom, Marx argued that the idea of God is merely an illusion designed to oppress the poor masses.

History is driven forward dialectically by material forces through which ruling classes use religion to exploit the working class. Marx's inverted Hegelianism inspired numerous socialist revolutions that spanned most of the 20th century, starting and ending with the Soviet Union from 1917 to the 1991. However, Marx's prediction that the historical dialectic would lead eventually to worldwide Communism did not come to pass. As a result, the high point of Marxism lies in the past. Nonetheless, despite the steady decline of Communism at the end of the 20th century and into the 21st, Marx's ideas continue to remain influential in several countries around the world.

While the history of Communism's powerful presence in the 20th century might make it appear that Marx's economic application of Hegel's method triumphed over Hegel's own Idealistic interpretation of it, this is not the case. As the world watched the decline of Communism during the 1990s, Francis Fukuyama observed that liberal democracy and capitalism had gained the upper hand over centrally controlled economic and political systems like those of the former Soviet Union, which Marx inspired.

In providing an explanation for why history moved in an anti-Marxist direction, Fukuyama uses both Kant's and Hegel's ideas. He argued, "As Kant postulated, there was an end point to the process of history, which is the realization of freedom here on earth." For Hegel, who built on Kant, "the embodiment of human freedom was the modern constitutional state, or again, what we have called liberal democracy."¹⁴ In short, Hegel can be understood as "the philosopher who justified preservation of a large realm of private economic and political activity independent of the control of the state."¹⁵

Thus, from the Premodern to the Modern world, Idealism has continued to acquire a voice. What began in Greece centuries ago as one way to resolve the subjective-knowledge–objective-reality dilemma found its most modern expression in Hegel; and it is Fukuyama who draws from Hegel's absolute Idealism by way of Kant to explain why Freedom as

embodied in the Truth of liberal democracy and marketplace economics triumphed over Nazi and Marxist tyrannies. While Fukuyama was premature in calling this triumph the end of history, it was nonetheless through the eyes of modern Idealism that he interpreted history's mighty changes at the end of the 20th century.

REALISM

Like Idealism, Realism originated in early Greece and is normally associated with Plato's most gifted student, Aristotle. Despite Aristotle's deep affection for his beloved mentor, he vigorously opposed Plato's philosophy of Forms. In its place, he offered an alternative way of thinking about the nature of Truth and of resolving the subjective-objective dualism. For Aristotle and other advocates of Realism, knowledge develops from the outside in. That is to say, impressions of the outside world filter through the five senses, and the higher cerebral functions of the brain convert them into mental images that comprise human knowledge of how reality actually works. This means that human beings can obtain a reliable understanding of the physical universe because it is given through empirical experience and mathematical measurement.

Unlike Plato, who held that Truth consists of abstract Ideas or Forms, Aristotle claimed the opposite. He rejected Plato's belief in the existence of innate Forms. Instead, he viewed reality as comprised of individual objects that exist in the world of nature or matter, such as dogs, horses, trees, and even people, whom he defined as rational animals. Truth does not exist as Forms or abstract Ideas in the mind disconnected from matter. Forms are nothing other than the shapes various objects take, which means that forms change as objects change. As horses and trees grow, their forms change to reflect that growth.

Aristotle differed from Plato on another essential issue. Unlike Plato, who believed that discovering Truth consists of activating the internal Forms through experiencing external objects, Aristotle held that the mind is able to generalize about entire classes of objects by observing numerous similarities within each class or group. For example, through repeated observations of different dogs and cats, humans can use reason to create mental categories that differentiate dogs from cats. The mind's ideas originate through experiencing objects that exist outside the mind in the material world. Stated simply, subjective images mirror objective reality.

Just as Berkeley carried Plato's and Descartes' Idealism to its logical conclusion, well-known 17th-century English philosopher John Locke (1632–1704) did the same for the Realism of Aristotle. It was Locke who proclaimed that (1) the mind is a blank slate (*tabula rasa*) at birth, and (2) all ideas, both simple and complex, originate through the body's sensations.¹⁶ For Locke, innate ideas do not exist because all ideas originate through experiences of the outside world as they sift through the senses.

For example, knowledge of the universal law of gravitation is not innate. It must be discovered through observation, experience, and mathematical measurement.

Building on Aristotle's ideas, Locke took Premodern Realism to the level of Modern rational empiricism that builds on the belief that the brain's knowledge of the universe parallels the way in which the universe actually works. Truthful knowledge about reality, as contained inside the human mind, corresponds to the real world that exists outside the mind. For modern Realists, evolution has provided five reliable senses that enable individuals to see, hear, smell, taste, and touch the world as it actually exists.

One of the most recent examples of how Aristotle's Realism and Locke's empiricism have exerted their influence in the Modern world is found in the writings of philosopher J.J.C. Smart (b. 1920), who, like Skinner, is a determinist. As was discussed in a previous chapter, in his laboratory research on animals Skinner used the language of "contingencies of reinforcement," which he applied to human behavior in his denial that Freedom exists. Smart's focus is not on behavior, but instead on the neurological and biochemical processes of the brain.

Like Newton, Smart holds that the physical universe operates like a machine and that modern science is gradually uncovering the mechanical laws of cause and effect by which it operates. Just as Newton demonstrated that Freedom does not exist in the operations of the cosmos, scientists who study the brain will eventually demonstrate that all human thought can be reduced to natural laws.¹⁷

In addition, all interior experiences such as the existence of consciousness, feelings like love, pain, desire, or value, and conceptions like right and wrong will someday be explained in terms of mechanical, although complex, neurological and biochemical brain functions. Thus, like Skinner, Smart concludes that there is no need to presume the existence of the mind, because what is normally called the mind is really nothing more than the biochemical processes that occur inside the brain. Given enough time, modern science will prove it.

This assumption is far from certain, according to writers like Louis P. Pojman who takes issue with the mono-causal explanations of writers like Skinner and Smart. In Pojman's view, modern behavioral psychology and brain research do not support the conclusion that human subjectivity can be reduced to either external or internal antecedent mechanical causes. Such an assertion, says Pojman, is as much an act of faith as it is of science: "No one understands how consciousness arises, what causes the phenomenal feel or awareness that accompanies our every waking moment, and how consciousness unifies all our various experiences."¹⁸ At the same time, Pojman acknowledges that the "materialist has a certain amount of empirical success to his or her credit . . . The more that neuroscience can explain, the more impressive the credentials of materialism become. However, can it really explain the self, consciousness, free will?"¹⁹ Pojman's answer is no.

Jerome Shaffer supports Pojman's view that mental processes differ from neurological events that occur within the brain. He maintains that no examination of the physical properties of the brain will lead to uncovering a person's specific thoughts that arise within the thinking process. Viewing the brain from the outside, as a scientist uses sophisticated oscilloscope technologies to study the brain's reaction to various stimuli, is different from the experience of consciousness or mind that emerges inside an individual's head. Shaffer contends that each person's mental experiences are analogous to someone who owns a house. Someone can observe the house from outside, like the neuroscientist who studies the brain, without ever knowing what is taking place on the inside, including the mental experiences of neuroscientists themselves. Nor is it possible for someone who observes a house from the outside to see how the owner has arranged or might rearrange the furniture, that is, the thoughts.²⁰

Philosopher Colin McGinn agrees with both Pojman and Shaffer. According to McGinn, consciousness and the human capacity to think remain a mystery that no field of inquiry such as psychology, neurology, or philosophy can resolve to everyone's satisfaction through rational inquiry, scientific experimentation, or any other method of empirical examination or measurement.²¹ The Premodern Greek attempt to explain how the subjective mind is connected to objective factors has yet to be resolved. In Pojman's words, "we stand in wonder at the dualism that forces us to take both an objective/determinist and a subjective/libertarian perspective of conscious behavior. This dichotomy seems unsatisfactory, incompatible, and yet inescapable."²² Anyone who asserts that modern science has proven, or possibly ever will prove the non-existence of the mind has put faith before the facts, or, as it is sometimes called, "science in the gaps."

While modern science struggles to close the gap, perhaps one way to explain why the subjectivity-objectivity dualism has yet to be resolved, and may never be, is to compare Newton-Einstein determinacy against Heisenberg-Lorenz indeterminacy. It is entirely possible that the brain's relationship to the mind is a combination of determinism and indeterminism and that the precise point where one stops and the other starts cannot be established with precision. The determinism of Skinner and Smart rests on a Newtonian-type scientific image of a closed and mechanical universe.

However, another image of equal scientific credibility exists side by side with Newton's. Following Heisenberg and Lorenz, much that happens in the physical universe is the result of indeterminacy and not determinacy. Like weather and other complex systems with multiple subsystems, both the neurological and biochemical development of the brain are chaotic and therefore subject to randomness. Because of the brain's complexity, undetectable little changes can lead to big consequences in the development of the mind that emerges out of it.

No doubt, thinking would not be possible without the brain's biochemistry and neurology, which serve as the foundation of thought. However,

once the connection occurs between the brain and the mind that emerges out of it as a result of reproduction, gestation, and child rearing, all persons develop the capacity for thought. Then as adults, they arrange their thoughts as if they were roaming around in the house from room to room with the shades pulled down. No one on the outside can see what is happening inside.

In other words, it is through a combination of determinacy and indeterminacy that every person becomes a conscious being with the capacity for self-initiated thinking, which is nothing other than the ability to consider alternative beliefs and actions before deciding which ones to choose. Simply stated, if an indeterminate mind emerges out of the biochemistry of the brain, then Freedom, which is the human capacity to think and choose, is the essential prerequisite for the pursuit of Truth and for deciding to live by it.

AND THE WINNER IS . . .

At the start of the 21st century, what view has the edge: Skepticism, Idealism, or Realism? The answer is some combination of all three, although Realism has left the deepest footprint in the soil of the Modern world. The above discussion of the various ways in which many creative thinkers from ancient to modern times have tried to resolve the subjective-objective conundrum demonstrates the diverse ways in which reason has been used as a tool to discern the Truth. Starting with Plato and continuing through Descartes, Berkeley, and Hegel, Idealists emphasize subjectivity over objectivity. In its most extreme expression, Berkeley denied altogether the existence of the physical universe by reducing it to ideas.

In addition, in response to Hume's Skepticism, Kant's revolution in describing how the mind creates knowledge by synthesizing innate mental categories with experience gave a modified form of modern Idealism a boost. Kant helped reestablish confidence in modern science's Truth claims regarding the operations of the physical universe according to the Newtonian laws of nature. At the end of the 20th century, Fukuyama drew on Kant and Hegel's Absolute Idealism to explain why liberal democracy and marketplace economics, as expressions of Freedom, triumphed over tyranny. Thus, modern idealism has found its voice through influential advocates.

On the Realism side, starting with Aristotle, modern writers like Skinner and Smart disavow entirely the existence of an autonomous mind. They reduce mental events to contingencies of reinforcement or biochemical processes in the brain. No doubt, Newton's view that the universe is a mechanical system governed by impersonal laws of cause and effect serves as the model through which many modern Realists reduce subjectivity to some form of objectivity. At the same time, as has been pointed out on numerous occasions, it is ironic that they rely on their own subjective think-

ing to deny that humans have the capacity for subjective thinking. After all, given the indeterminate nature of thought, there are alternative views to the ones they freely chose.

Dating from the time of Pyrrho, and continuing through Hume, Mead, and Rorty in the Modern period, Skeptics deny that anyone, be they Idealist or Realist, can know the Truth with certainty. For Mead, differences in perceptions of Truth can be explained by cultural relativism, and for the postmodernist Rorty, along with Derrida, Foucault, and others, Truth is reduced or historicized to the norms of the day.

While cultural relativists and postmodernists stand in the Kantian tradition because they believe that the world's diverse views of Truth are mental constructions that cannot be verified objectively, they disagree with Kant on one crucial issue. The mind's categories or languages through which the subjective mind defines objective reality are not innate. For Mead and Rorty, subjective knowledge of Truth emerges from cultural conditioning and is always relative to the society that develops it according to its own norms. In short, they carried Kant's Copernican revolution of the way the mind works in constituting knowledge to the next level. While they accept that knowledge is a mental construction, they reject that there are innate categories that do the constructing.

Chomsky's position is closer to Kant's than to Mead's or Rorty's. Just as Kant underscored the centrality of the mind's inborn categories, Chomsky holds that all persons possess at birth a universal grammar that structures how they acquire language and develop a reliable view of objective reality. Universal grammar transforms empirical experiences into knowledge. Despite Chomsky's similarity with Kant, modern linguists are far from unanimous on this crucial point. For Skeptics in particular, no hard evidence exists to support the case for the presence of inborn mental categories of any kind.

Like Idealism, modern Skepticism enjoys widespread support among many individuals who base their personal beliefs on some form of philosophical relativism. This usually takes the expression, "My view is just as good as yours and vice versa." Because there is no way for anyone to step outside of his or her head in order to view reality objectively, each person's opinion is as good as anyone else's. However, like Realism, Skepticism has its ironic side. The claim that the Truth cannot be known is a claim to know the Truth. However, if it is not possible to know the Truth, then the Truth claims of Skeptics are subject to Skepticism. Therefore, Skeptics should be skeptical about their own Skepticism.

Thus, given the diverse number of rational approaches for getting to the Truth of things by resolving the mind-matter dilemma, it is clear that the connection between subjective knowing and objective reality is no simple one-to-one relationship. If this connection were uncomplicated and obvious to all observers, then everyone by now would come to the same conclusion. However, the contrary is the case. Philosophers like Plato, Locke,

Hume, Kant, Skinner, Rorty, Chomsky, and all other Idealists, Realists, and Skeptics of every stripe, are quite literally all over the map in their explanations of how to resolve this dualism.

The key to understanding why such diversity of viewpoints exists most likely lies in some combination of both the determinate and indeterminate aspects of the human brain's connection to the mind. The operations of both the brain and thought processes that emerge out of it are extraordinarily complex. In this regard they more nearly parallel the principle of indeterminacy that Heisenberg first defined and later researchers like Lorenz and others confirmed. There is no single mathematical formula that predicts how various people view the world and their place in it or how future generations will think and act.

While human beings are unique in creating culture and using reason at very high levels of linguistic abstraction, the indeterminate nature of each person's capacity for thinking is probably the source of why Idealists, Skeptics, and Realists hold different views of how the subjective mind connects to objective external reality. Despite centuries of reflection and experimentation by numerous Premodern and Modern inquirers of all kinds, multiple perspectives remain. Thus, it would still appear, as Pojman contends, that "we stand in wonder" at the baffling and mysterious dualism that has yet to be fully understood.

One final question remains. Despite the lack of agreement between the Idealists, Realists, and Skeptics, in the give and take of debate, who has the edge? While both Idealism and Skepticism have remained influential in the minds of many, it would appear that over the past few centuries Realists have gained the upper hand—for the following reason. Idealists believe that reality is envisioned from the inside out. The pursuit of Truth for Idealists begins by examining the subjective mind to see how it produces images of the outside world. The focus is not on how the external world works but rather on how the subjective mind operates to construct images of external reality. Skeptics doubt that Truth can be known with any degree of confidence.

This means that both Idealism and Skepticism are less given to an empirical investigation of the physical universe and in discovering the recurrent patterns, also called natural laws, by which it operates. Idealists look inward, and Skeptics do not seek to discover Truth because, if by definition it remains forever hidden from the human eye, why look for it? Realists contend that the mind can know objective reality from the outside in.

Aristotle's legacy laid the Premodern foundation of modern science that really began in the 13th century when Roger Bacon called for the empirical study of nature. In a nutshell, the transformation from Premodernism to Modernism resulted directly from Baconian Realism, which served as a philosophical framework for the emergence of modern science. Even Kant's modified Idealism, based on the belief that the mind possesses innate categories that construct knowledge from external experiences that sift through the senses, contributed to this forward momentum.

For Realists, the physical universe “out there” can be known by the subjective mind that operates “in here.” Furthermore, as Kepler, Copernicus, Newton, and others demonstrated, the cosmos runs like a big machine of its own accord without intervention, and its natural laws, which can be discerned rationally and empirically, can be applied through technology to the transformation of society. In addition, modern scientists have increased their confidence level regarding the outcomes of their work as their research methods and technologies have become more sophisticated, as for example in the case of understanding cosmology in terms of the steady state theory, which has been replaced by the Big Bang theory.

Examples are easy to identify. They include the development of various experimental laboratory techniques, mathematical measurement tools, computer simulations, global sharing of results, and so on. Nonetheless, despite modern science’s continuing discovery of nature’s hidden secrets, Realism has yet to silence either Idealism or Skepticism. Nor is it likely to do so in the future. As the above discussion shows, the world has no shortage of Idealists or Skeptics who hold forth about the nature of both the mind and the world outside of it as well as how the two sides relate to each other. However, when it comes to the mighty forces that produced the modernization process and its ongoing stages of evolution from industrialization to genetic experimentation, Realism has the edge.

At this juncture, the basic need for Freedom pushes into the foreground. There still remains much to be learned about the operations of the universe and the complex connections between human subjectivity and objective reality, which has yet to be deciphered. No doubt, life’s indeterminacies make this a challenge of the highest order as the modernization process goes forward. The implication, of course, is that at the beginning of the 21st century the need for Freedom is as great as ever. The cultures and communities that remain free to make scientific progress in uncovering the connections between the determinate and indeterminate patterns of the natural world and human nature, and in applying them to the needs of the future, will increase their long-term potential to survive, indeed, to thrive, in the emerging global village.

NOTES

1. What little is known about Pyrrho of Elis appears in the writings of ancient philosopher Diogenes Laertius, *Lives of Eminent Philosophers*, trans. R. D. Hicks (Cambridge, Mass.: Harvard University Press, 1925), p. ix, 74–88.
2. David Hume, *An Enquiry Concerning Human Understanding*, in *Hume's Enquiries*, ed. L. A. Selby-Bigge, 2nd ed. (Oxford: Oxford University Press, 1902).
3. Margaret Mead, *Coming of Age in Samoa* (New York: William Morrow and Company, 1928), and *Sex and Temperament* (New York: William Morrow and Company, 1935).
4. Richard Rorty, *Philosophy and the Mirror of Nature* (Princeton, N.J.: Princeton University Press, 1979), p. 367.

5. Peter Berger and Thomas Luckmann, *The Social Construction of Reality* (Garden City, N.Y.: Doubleday, 1966), p. 11.
6. Wendell Bell, *Foundations of Futures Studies: Human Science for a New Era*, Vol. 2, *Values, Objectivity, and the Good Society* (New Brunswick, N.J.: Transaction Publishers, 1997), p. 174–175.
7. Noam Chomsky, *Aspects of the Theory of Syntax* (Cambridge, Mass.: Massachusetts Institute of Technology Press, 1965), p. 59.
8. Noam Chomsky, “Language and the Mind,” in *Readings in Psychology Today* (Del Mar, Calif.: C.R.M. Books, 1969), p. 286. Italics appear in the original quotation.
9. Edith Hamilton and Huntington Cairns, eds., *The Collected Dialogues of Plato*, Bollingen Series LXXI (Princeton, N.J.: Princeton University Press, 1989), and A. E. Taylor, *Plato: The Man and His Work* (New York: Dial Publishing, 1936).
10. Bishop George Berkeley, *Treatise Concerning the Principles of Human Knowledge* (London: Brown & Sons, 1907), and *Three Dialogues between Hylas and Philonous*, ed. Colin M. Turbayne (Indianapolis, Ind.: Bobbs-Merrill, 1954). Berkeley is an objective Idealist in the sense that he accepts the existence of a world outside one’s perception of it, although he reduces it to ideas. Subjective Idealists, also known as Sophists, believe reality exists only in the mind and that the outside world is merely a projection of the mind’s ideas. Berkeley did not deny the existence of an objective reality. Sophists do.
11. Immanuel Kant, *The Critique of Pure Reason*, trans. F. Max Muller (New York: Anchor Books, 1966).
12. George Wilhelm Friedrich Hegel, *The Phenomenology of Spirit*, trans. A. V. Miller (New York: Oxford University Press, 1977).
13. George Wilhelm Friedrich Hegel, *Reason in History*, trans. Robert S. Hartman, New York: Bobbs-Merrill, 1953).
14. Both quotations are found in Francis Fukuyama, *The End of History and the Last Man* (New York: Avon Books, 1992), p. 60.
15. Fukuyama, *The End of History and the Last Man*, p. 61.
16. John Locke, *An Essay Concerning Human Understanding*, ed. A. S. Pringle-Pattison (London: Oxford University Press, 1924).
17. J.J.C. Smart, “Sensations and Brain Processes,” in *Philosophical Review* 68 (1959): 141–156.
18. Louis P. Pojman, *Who Are We? Theories of Human Nature* (New York: Oxford University Press, 2006), p. 244.
19. Ibid., p. 238.
20. Jerome Shaffer, *Philosophy of Mind* (Upper Saddle River, N.J.: Prentice-Hall, 1994).
21. Colin McGinn, “Consciousness and Content,” *Proceedings of the British Academy* 74 (1988): 219–239.
22. Pojman, *Who Are We? Theories of Human Nature*, p. 261.

CHAPTER 6

Inside the Big Machine

As the preceding chapters make clear, (1) modernization is the process that propels globalization forward within limits imposed by definable and persistent polarities, and (2) modern science and technology are the engines that have driven modernization through its distinct stages from industrialization to the current level of molecular research. Newton's and Einstein's discoveries shaped the Modern world's perception of the universe as a big machine that runs by determinate natural laws. The works of Heisenberg, Lorenz, and others demonstrate that this vast cosmos is not a closed system of invariant cause and effect connections. Rather, invariance, defined as Freedom, permeates the very structure of the physical creation and the human mind.

As the future unfolds, the degree of variance that exists throughout the world will only increase. It will not stop at the edges of the physical universe, whether in far away galaxies or inside the human brain, but will penetrate deeply into the social and personal core of the evolving global village. Nowhere will this variance be greater than in the arena of human religiosity, which stands at the opposite end of the continuum from modern science in regards to perception of the nature of reality. If modern science consists of a hard-core empirical approach to the quest for Truth, religion is most assuredly soft core.

This does not mean that the religious quest to find the Truth is necessarily an inferior form of inquiry compared to the methods and goals of modern science. It is not. It is merely different. Even though the current intelligent design debate turns on whether or not scientific evidence supports belief in God, the religious approach to finding the Truth is grounded

in faith and not in scientific investigations that are conducted according to strict experimental procedures or mathematical models. It takes a leap of faith to connect modern science's description of the universe's incredible intricacies to a spiritual force that created them. This does not mean that there is no creator behind the creation. It only means that such an assertion stems from faith and not science, no matter how much scientific evidence people of faith accumulate to back their religious beliefs.

In addition, as described in chapter 2, science has not driven religion out of existence. Rather, in the Modern world, it has led primarily to privatization and to a lesser extent to indifference. At the beginning of the modernized 21st century, religion is (1) alive and well throughout the emerging global village, and (2) living comfortably side by side with science and secularization. As the global transformation continues into the 21st century and beyond, formerly isolated cultures are spreading around the planet with increasing speed. Religion sits at the center of this dispersion. This means that the future inhabitants of the emerging global village will be called upon to live amidst religious diversity and to learn about each other's sacred traditions.

Furthermore, if ever there was a case for not reducing mental processes to the brain's neurology, it lies in the world's religious diversity. If the biochemistry of the brain is basically the same in everyone, why do so many different religious views of reality exist? In Truth, apart from the unique historical circumstances out of which each spiritual tradition arose, no one knows for sure. At the same time, modern science provides a model for making an educated guess. In all probability, the answer can be found in the principle of indeterminacy, that is, Freedom. Simply stated, the human mind that emerges mysteriously out of and depends on the brain is like a butterfly; and once it starts waving its wings, especially in the case of the religious imagination, it flutters in many different directions.

The purpose of this chapter is to describe the diverse views of Truth as they appear in some of the world's major religions. The goal is not to arrange these views hierarchically on some ladder of greater to lesser truthfulness, but rather to identify the religious differences that global citizens will confront as the trend toward globalization continues to transform life on earth. Unlike modern science, where discoveries like the universal law of gravitation, the general and special principles of relativity, and the principle of indeterminacy, among others, are universally accepted, no such consensus exists in the realm of spirituality.

Instead, religious views are best characterized by their diversity and not their unity. Like the philosophical schools described in the last chapter, religions are also quite literally all over the place in how they understand reality. Nonetheless, even though widespread differences exist, all of them assume that some kind of intangible spiritual entity is embedded within the material universe in a way that can be humanly experienced. Religions

differ in how they define the nature of the spiritual reality that is hidden inside the big machine.

Just as philosophical inquiries into the operations of the mind can be divided into skepticism, idealism, and realism, as described in the previous chapter, religion also contains its own distinct subdivisions. Despite the thousands of spiritual traditions that exist around the world, they can be grouped into four main types: pantheism, monotheism, animism-polytheism, and spiritual non-theism. Each is described below.

PANTHEISM

The most basic assumption that pantheists make about the relationship between the spiritual and material is that the material universe is the outward form or body of a spiritual power that lies concealed within it. Hinduism is the oldest living pantheistic religion in the world. It started more than 5,000 years ago in ancient South Asia and currently claims nearly 900 million followers. While the vast majority of Hindus live in India, Hinduism is dispersed around the world in over 80 countries.¹ Hinduism is the most systematically developed expression of pantheism found anywhere on earth.

At the same time, this huge spiritual tradition appears paradoxically to be a form of polytheism, because Hindus worship over 300 million deities. While it might seem like a contradiction to believe that a single God and many gods can coexist simultaneously, Hindus have no difficulty in connecting the latter to the former. The millions of deities are merely manifestations, called avatars, of the one supreme spiritual power of the universe, called Brahman, which is the Hindu name for God.

Like all pantheists, Hindus believe that God is everywhere and permeates everything. The many finite gods are merely diverse religious expressions of the one and only infinite God who appears in many forms in order to guide devout followers in their journey toward right belief. Nothing stands outside of God's ubiquitous embrace. Stated in the language of Hinduism, Brahman integrates seemingly separate entities into a unified whole. How is this possible?

If Brahman is everywhere, then according to Hindu tradition, it is logical to conclude that a part of Brahman exists in every object of the universe—from rocks to humans to everything else in between. The small part of Brahman that each separate thing in the cosmos possesses is called the atman, or soul. Stated differently, atman is Brahman, which implies that every person and object in the universe possesses a soul (small "s") that is identical to the Cosmic Soul (big "S"). Separate souls do not exist as other religions define them. In pantheistic religions like Hinduism, all souls are comprised of the same spiritual essence as the Cosmic Soul.

Nowhere is this most basic pantheistic belief better expressed than in the sacred Hindu scripture, the Chandogya Upanishad. It states, "In the

beginning there was Existence alone—One only, without a second. He, the One, thought to himself: let me be many, let me grow forth. Thus, out of himself he projected the universe.” In continues, “Having projected out of himself the universe, he entered into every being. All that is has its self in him alone. Of all things he is the subtle essence. He is the truth. He is the Self. And that . . . THAT THOU ART.”² The phrase, “that thou art,” succinctly summarizes the relationship between Brahman (THAT) and the soul or atman that exists in all beings (THOU ART).

Even though the atman is identical in its essence to Brahman, Hindus and other pantheists hold that the soul is alienated from God by being trapped in the material universe. The goal is to free the soul from this entrapment so that it can return to God. Liberating the soul takes the form of a spiritual journey that stretches over many lifetimes. Hindus use several concepts to describe how this happens, such as reincarnation (also called transmigration or rebirth), karma, and enlightenment.

Reincarnation refers to the soul’s cyclic journey through many bodily forms. Liberating the soul from rebirth occurs through a process of progressive advancement toward the goal of enlightenment. With enlightenment comes liberation. In a nutshell, until the soul becomes liberated, it reincarnates repeatedly into a new body upon death. The reincarnation process stops upon enlightenment, which can be achieved through many pathways such as meditation, pietistic devotion, and others.

The universal law of karma drives the reincarnation process. Metaphorically speaking, karma is like a cosmic moral calculator that is structured into creation by God and that keeps track of each person’s thoughts, words, and deeds. Each person’s next stage of rebirth is based on the balance of good and bad karma that he or she accumulates during each lifetime. An individual can move either up or down on the ladder of being. If good karma outweighs bad karma, rebirth goes upward. If bad karma exceeds good karma, rebirth goes downward. The spiritual goal is to accumulate increasing amounts of good karma through successive reincarnations, which ultimately enables the soul to return to God or Brahman by freeing it from rebirth.

The total number of transmigrations that any single individual will experience depends on his or her cumulative karmic accomplishments during succeeding life cycles. The more good karma one accrues, the faster one travels toward enlightenment. The more bad karma one amasses, the longer it takes for the soul to return to God. In other words, it falls on the shoulders of each individual to choose the thoughts, words, and deeds that determine both the direction of reincarnation and the number of rebirths it takes to arrive at the end point of enlightenment.

These three ideas—Brahman-atman or God-soul, liberation from reincarnation through enlightenment, and karma—comprise the core reality concepts of Hinduism in particular and pantheism in general. The only remaining issue pertains to the specific thoughts, words, and deeds that lead

to the accumulation of good rather than bad karma. Hindus refer to this as dharma, which consists of doing the duties that lead to a better rebirth. These include obeying caste and life-cycle duties as defined in sacred texts, worshiping deities through devotional activities, practicing rigorous forms of bodily discipline or yoga, and meditating.³ Along with worshiping God, living by the highest values of Truth, kindness, compassion, caring for the needs of other, and justice help free the soul or atman from the cycle of rebirth.

Closely related to the Hindu pantheistic view is the ancient Chinese religion of Daoism, which was founded by the fabled ancient Chinese sage, Laozi (or Lao tzu), who was born about 600 B.C.E. He is the alleged author of Daoism's main scripture, Daodejing (The Way of Life), which summarizes in poetic verse Daoism's main beliefs. Daoism's approach to combining the spiritual and material dimensions of human experience parallels many of Hinduism's pantheistic concepts, but it also differs in significant ways.

Daoism defines ultimate reality as Dao or simply "the way," which means literally how the ultimate power of the universe works. This power gives rise to, sustains, and brings about the demise of all things. It permeates and is hidden within everything that exists. It is mysterious and ineffable. Although words such as eternal, infinite, invisible, empty, bottomless, continuous, inaudible, subtle, without shape or form, and elusive can be used to indicate what the Dao is like, in the final analysis it is indescribable. It is simply there. As in all pantheistic beliefs, the ultimate permeates everything. For Daoism, the Dao is the mother of "ten thousand things," an ancient Chinese way of saying everything.

In its original form, as articulated by the mythical sage Laozi, the Dao was not viewed as a personal deity to whom one could pray for earthly support and guidance. Instead, the Dao was understood to be an impersonal primordial creative force. Later believers transformed earlier Daoism into a popular religion that includes deity worship and methods for pleasing the many gods who attend to every aspect of daily life. Daoism's main focus has always been on living in harmony with the Dao, the unseen spiritual power that permeates every aspect of physical existence.

As expressed in the Daodejing, Laozi advocated imitating the way of nature, especially the flow of water, as the key to understanding how to live in harmony with the Dao. In Laozi's words,

Nothing in the world is softer and weaker than water
But nothing is superior to it in overcoming the hard and strong;
Weakness overcomes strength
And softness overcomes hardness.⁴

As water ceaselessly washes over jagged rocks, it eventually erodes even the roughest edges into smooth surfaces. Water's power lies in the gentle and effortless movement that no object of nature can ultimately resist.

The image of nature's unforced transformations from one state to another became Daoism's metaphor for human action, or better stated, a kind of effortless nonaction that Laozi called *wu wei*. *Wu wei* refers to activities that emerge spontaneously and simply as individuals strive to imitate the ways of nature. They are not forced or motivated by greedy and aggressive human cravings that are designed to change the world according to some grandiose and disruptive vision. Pushing against the pulse of nature is counterproductive and leads only to chaos and disharmony. To imitate nature is to be at one with the Dao rather than to be at odds with it, which in turn leads to harmony and greatness. Daoism's pantheism, as paradoxical as it appears to be, is depicted in the following quotation.

Act without acting.
Serve without serving.
Taste without tasting.
Whether it is great or small, many or few,
Repay hatred with virtue.
Deal with the difficult through what is easy;
Deal with the big through the small.
The difficulties of the world
Should be dealt with through the easiest;
The great things of the world
Should be accomplished through the smallest.⁵

Unlike Hinduism, which includes obeying caste and life-cycle duties, Daoism advocates effortless action by imitating nature. The end result is an increase in inner tranquility that Daoists strongly believe leads to external social and political harmony. Even though Hinduism and Daoism differ in their approaches, both succeed in offering rich images that are intended to enhance the potential for long-term human survival and adaptation by combining a pantheistic spirituality with materiality.

MONOTHEISM

Monotheism shares with pantheism the belief that there exists an absolute spiritual power that created, sustains, and ultimately determines the fate of the universe. However, monotheism differs significantly from pantheism in the way in which it understands how this absolute power, or God, connects to the finite universe. Whereas pantheists believe that God permeates the universe and that the universe is the body of God, monotheists assume that God remains separate from the universe God created.

The major challenge confronting all forms of monotheism is to explain how God, who is separate from creation, connects to it. Or, stated differently, how does God bridge the gap? The answer is through revelation. Three of the world's major religions that view revelation as the major medium that God uses for communicating divine will to humanity are Judaism (20 mil-

lion members), Christianity (2.3 billion members), and Islam (1.3 billion members). Each of these religious traditions emerged in the Middle East and shares a common heritage through Abraham.

In addition to accepting the doctrine of divine revelation, all three Abrahamic religions hold that God chooses prophets and other mediators to receive divine revelation. While God's revelations are not limited to only one mediator, each Abrahamic religion identifies one special mediator who stands head and shoulders above the rest. The Jews believe that God revealed the Law of the Covenant to Moses; Christians assume that God chose Jesus to be crucified in order to redeem the world of sin; and Muslims presume that God conveyed perfect revelations to Muhammad.

All three of the monotheistic religions possess sacred scriptures that contain stories describing the unique circumstances through which God sent forth their special mediators. The Jewish sacred stories are recorded in the Tanak, the Hebrew Scripture that Christians call the Old Testament. Even though the Christian Bible contains both the Old and New Testaments, Jews differ from Christians in how they view the Old Testament. Christians include the Old Testament in the Bible because they believe it foretells the coming of the Messiah-Savior Jesus, whose story is recorded in the New Testament. For Christians, the Old and New Testaments tell a continuous story of God's unfolding purpose, which started with Abraham and ended with Jesus. For this reason, the Bible contains both Testaments.

Jews do not incorporate the New Testament into their sacred scripture because they do not accept the Christian conviction that Jesus is the Messiah. Instead, they accept that the Tanak is sufficient by itself to anchor Jewish identity. Islam's sacred scripture is the Quran, which Muslims believe contains the revelations that God transmitted to Muhammad. Through these diverse scriptures, stories, and sacred revelations, the followers of the three Abrahamic religions define the belief boundaries that separate their distinctive monotheistic ways of combining spirituality and materiality.

Despite the differences that exist in their sacred stories and scriptures, Judaism, Christianity, and Islam parallel each other on one crucial issue. As Abrahamic religions, they start with the assumption that humanity is alienated from God and, therefore, that all persons are in need of being restored back to a correct relationship with God. This alienation is described in the first 11 chapters of Genesis, which begins with the story of Adam and Eve's disobedience and ends with the rebellious construction of the Tower of Babel. In between these points, chapters 1–11 describe how humanity fell into alienation by refusing to obey God. As a result, starting in chapter 12, God called Abraham to begin a journey of faith that would restore humanity back to God.

All three Abrahamic religions identify God's call to Abraham as the starting point for their faith story, and each one offers an alternative theological vision of how humanity can journey back to God. The Jewish pathway is described in the Torah, the first five books of the Tanak from Genesis

through Deuteronomy. Starting with creation and the Adam and Eve story, the Torah ends with the Moses-led escape from Egyptian slavery and 40 years of wilderness wandering. It is during this time that God called Moses to Mount Sinai and revealed to him the Ten Commandments and other Laws of the Covenant, 613 in total.

According to the Torah, starting with Abraham, God selected the Jews as a great chosen people—a nation that would show the world how to be righteous by obeying the Law of the Covenant that God revealed to Moses on Mount Sinai. In turn, the Jews would inspire other nations to imitate their holy example with the end result that all of humanity would eventually be restored back to God. At the same time, the Jewish revelation that they were God's chosen people came with a heavy cost. If they followed the Mosaic Law, God would reward them with prosperity and a homeland of their own. However, if they disobeyed God by deviating from the Law, God would send prophets to reprimand and warn them and enemies to crush them and remove them from the land.

As told through the accounts of ancient Jewish writers, this is, of course, exactly what happened. God gave the Jews the promised land of Israel under King David because of their obedience. He then took it all away because of the disobedience of later generations and their kings. The ancient Jewish story of repeated cycles of God's rewards and punishments culminated in 70 C.E., when the Roman army destroyed the Temple in Jerusalem and expelled the Jews from Palestine. For the nearly 2,000 years that followed this Jewish catastrophe, the dispersed remnant kept alive the Torah revelations that identify the Jews as God's chosen people and the Law that serves as their moral standard.

Then, in the late 19th and early 20th centuries, modern-day Zionists initiated an international Jewish movement to return to Palestine for the purpose of re-acquiring the ancient homeland of Israel. Following the Nazi Holocaust, which created worldwide sympathy for the plight of the Jewish people, the United Nations created the modern state of Israel in 1948. For many Jews, despite centuries of discrimination in the Diaspora, which led to seemingly endless cycles of pogroms and persecution, the God of Abraham kept the promise. God brought them back to their ancient promised homeland where once again they could strive to become the great and righteous nation that God promised to build in Abraham's name.

Christianity is the second of the Middle Eastern religions to stem from the legacy of Abraham. Christianity builds on the Jewish sacred narrative of restoration, but also takes it in a totally different direction based on the life and mission of Jesus, whom his closest disciples called Christ or the Messiah. While much scholarly debate flourishes over the real identity and beliefs of the historical Jesus,⁶ little doubt exists that his followers saw him as God's chosen one, who died for the sins of the world and thereby guaranteed eternal life to believers who have faith in his resurrection.

As the second monotheistic path to restoration, Christianity presupposes that humans are affected by original sin, which began when Adam and Eve rebelled against God in the Garden of Eden, as described in chapter 3 of Genesis. Because of the stain of original sin that everyone inherits from Adam and Eve, humankind is incapable of self-restoration back to God. No one can become righteous enough to earn God's reward of salvation. According to the Apostle Paul, all fall short of the glory of God.⁷

The main conclusion that early Jewish converts to Christianity drew from the centuries of Jewish history that preceded Jesus's life is this: if God's chosen people cannot sustain righteousness over several centuries by following the Law of Moses, then who can? The answer: nobody. Thus, God took the initiative to provide an alternative restoration pathway that goes through faith and not obedience to Torah Law. In other words, for Jews, God gave the Torah Law as guidelines to righteousness and chose the Jews to set the example for others to follow. For Christians, Jewish history shows that this strategy did not work because the chosen people could not sustain their obedience to God's commandment. As a result, God created a different route to salvation.

For Christianity, God brought Jesus into the world to be crucified as the sacrificial lamb that takes away the sins of the world. The road to restoration lies not in self-initiated adherence to any given legal or moral code but by accepting through faith that Jesus Christ died for the sins of the world as revealed through his life, death, and resurrection. As Christians developed their theology of history, they eventually tied the Christ event to God's purpose that stretched back to the time of Abraham. From the start, God's intention in calling Abraham was to launch a journey of faith that would culminate in Christ.

This means that the New Testament should be read as an extension of the centuries-old divine plan that starts with the Old Testament. Simply stated, if someone wants know what God desires, he or she should start by reading Genesis and ending with Revelation. When traditional Jews rejected Christianity's revision of their sacred story as expressed in the Tanak, the split between Christianity and Judaism became unavoidable. Despite Jewish rejection, for Christians, God provided a New Covenant based on faith, which emerged out of the Old Covenant based on the Mosaic Law.

Islam offers another Abrahamic option within the Middle Eastern spiritual tradition. At this point, the question can rightly be asked: Are not two Abrahamic pathways back to God enough? For Muslims, the answer is no. Like Jews and Christians, who adhere to separate salvation narratives, Islam developed its own sacred story about why God found it necessary to set forth a third alternative.

Christianity assumes that the New Covenant created in Christ is the pre-ordained and therefore inevitable culmination of the Old Covenant created in the name of Abraham and the Mosaic Law. Given that Islam is the last in

a sequence of three Abrahamic religions, it became necessary for Muslims to justify the need for yet another set of revelations. Whereas Christians assume that God established a two-stage path of salvation, Muslims believe that God actually created a three-stage plan, which started with Judaism, advanced to Christianity, and ended with Islam.

Muslims hold that Islam corrects the mistakes that both Judaism and Christianity made in their responses to Abraham's charge to build a great and righteous nation and that God foresaw that this would happen. It is because both the Jews and Christians got it wrong, so to speak, that God found it necessary to commission another and final mediator to set the record straight. As a result, God gave to Muhammad new and improved revelations that built on and perfected the previous ones given to Moses, Jesus, and many other prophets that appear in the Jewish and Christian sacred scriptures.

What errors did Jews and Christians make? According to Muslims, God's call to Abraham to build a great nation was meant to include all of humanity as the chosen people. The Jews mistakenly applied this title narrowly to themselves to the exclusion of others. As a result of the Jewish misperception, God sent the prophet Jesus into the world to preach about God's universal love for all humanity. Jesus's followers erred when they created the doctrine of the Trinity that equates Jesus with God. For Muslims, it is blasphemous to identify any human being with God, including Muhammad. Only God is God. For Muslims, Jesus is a great prophet but not a divine savior who is God's equal.

As a result of the Christian deviation, God called Muhammad and commissioned him to recite the revelations that eventually became the Quran. Muslims hold that God did not intend for Muhammad to start a new religion but only to restore the original Abrahamic faith that both Christians and Jews misconstrued. Just as Jesus's followers considered him the Savior, Muhammad's admirers called him the Seal or the last of the great prophets. For Muslims, Muhammad's words as conveyed in the Quran are God's flawless revelations that serve as the perfect pathway to restoration.

A comparison of the three Abrahamic religions reveals that they stand in paradoxical relationship to each other. Each of them affirms that God's revelations are progressive. However, at the same time, each one believes that its revelations are complete and in no need of improvement. For Jews, the revelations found in the Torah and the prophets are sufficient for Jewish distinctiveness; for Christians, these are but spiritual steppingstones to Christ; and for Muslims, the Quran is God's perfect revelation, which embodies but also supersedes those given to Jews and Christians.

Thus, all three of the Abrahamic religions share the monotheistic assumption that the creator of the universe remains separate from the creation but at the same time communicates to humankind through revelation. From this point forward, they diverge in their beliefs about the best means by which humanity can return to God, that is, through Torah Law, Jesus the

Savior, or the perfect Quran. As a result, Judaism, Christianity, and Islam are exclusivist religions based on different sacred stories that define their respective pathways back to God—as God’s preferred choice. Stated differently, each religion holds that its scripture contains God’s all-perfect revelations that define the spiritual and moral mandates necessary for righteous living and ultimately for restoration back to God.

ANIMISM-POLYTHEISM

The third way of defining how the material and spiritual aspects of human experience are connected is animism-polytheism. Animism and polytheism differ from each other in significant ways, but they hold one characteristic in common. Both define the human experience of the spiritual in multiple terms. That is to say, whereas pantheism and monotheism see one ultimate spiritual reality, animism and polytheism see many spirits or deities. Where they differ is in their conceptions of how these manifold spirits and deities manifest themselves.

Animists assume that “all sorts of motionless objects as well as living and moving creatures possess souls or spirits, and that every human being has a soul or souls leaving the body during dreams and finally at death.”⁸ Animism views the many animate and inanimate objects of the world as possessing separate spirits or souls. These diverse spirits can be personal or impersonal, and they can affect human fate for good or ill. If they are disturbed or angered, they can bring forth wrath and misfortune. Or they can create good fortune if they are calm and content. The main goal of animists is to stay on the side of the spirits’ good graces and to avoid offending them.

For example, Japan is the home of one of the world’s best-known animistic religions: Shintoism. Shinto religion is based on the belief that nature is filled with the presence of thousands of spirits, called *kami*. “The *kami* harmonize heaven and earth and also guide the solar system and the cosmos. It/they tend to reside in beautiful places, such as mountains, certain trees, unusual rocks, waterfalls, whirlpools, and animals. In addition, it/they manifest as wind, rain, thunder, or lightning.”⁹ Shintoism recognizes the existence of more than 80,000 *kami*, who are honored at Japan’s more than 100,000 Shinto shrines. The goal of Shinto followers is to live in harmony with the *kami* spirits and thereby bring good fortune to all the people, plants, animals, and objects of the earth.

Unlike animists, who focus on internal spirits or souls, polytheists point outward to the existence of multiple deities that inhabit the earth. Polytheists quite literally see the gods everywhere; they make statues of them or depict them through some form of objective representation. Like animists, who see spirits indwelling everywhere in nature, polytheists also perceive that the gods inhabit natural settings in the clouds, under the ground, in the ocean, in the forest, and in other physical surroundings, especially high mountains. Polytheism often takes the form of henotheism, where the gods

are hierarchically arranged and where one chief god is assigned the task of overseeing, guiding, and, if necessary, disciplining wayward deities within the pantheon.

The religion of classical Greece is one of the most widely known forms of polytheism. The ancient Greeks perceived themselves to be surrounded by gods who could help or harm them. Zeus stood at the top of the Greek pantheon as a father figure who demanded respect and obedience from the other deities. Hera served as his beloved queen. Other gods performed complex functions that related to every aspect of daily living. Apollo protected flocks and herds. Artemis served as the guardian of children. Hermes led travelers to their destinations. Poseidon shielded seafarers from danger. Demeter assured a fertile harvest. Athena, the wise warrior maiden, safeguarded Athens from invasion. For polytheists around the world, whether ancient or modern, the gods are present everywhere in the cosmos; and discerning their will becomes a major preoccupation.

While animism and polytheism exist as distinct ways of connecting the spiritual and the material, they are often linked together. Perceived inner spiritual forces are sculpted into dazzling icons or painted as colorful deity images. For example, Native American Cherokees combine both in their sacred beliefs that every visible and artistically depicted creature possesses an inner spirit that is separable from its physical body. Cherokee animism-polytheism encompasses a range of spirit beings, immortals, and numerous mythological creatures. Like Shinto animism and ancient Greek polytheism, Cherokee religion embraces the belief that the material and spiritual dimensions of human experience are connected through the presence of multiple deities.

SPIRITUAL NON-THEISM

Spiritual non-theistic religions also combine the spiritual and material aspects of human experience, but in ways that differ substantially from pantheism, monotheism, and animism-polytheism. Like the latter three, spiritual non-theism dates back thousands of years. To fully grasp how spiritual non-theism combines spirituality and materiality, it is necessary to distinguish it from the modern form of nonspiritual materialist-atheism, which rejects any form of spirituality altogether. While there are examples of atheism in ancient and modern Asia, Western nonspiritual materialist-atheism arose as a reaction against traditional forms of Greco-Roman animism-polytheism and Judeo-Christian monotheism.

For Western materialist-atheism, there is no spiritual reality anywhere in the universe—no God, no soul, and no life after death. While spiritual non-theism also disavows belief in God or gods of any kind, many spiritual non-theists believe in the existence of an eternal soul. They also hold that the main purpose of every person's life is the attainment of spiritual

goals. The main difference between nonspiritual materialist-atheism and spiritual non-theism is that spiritual non-theism incorporates a deep spiritual dimension of human experience and nonspiritual materialist-atheism does not. Two of the most important forms of spiritual non-theism are Buddhism and Jainism, which like Hinduism sprang from the spiritual soil of ancient South Asia. The modern form of nonspiritual materialist-atheism will be discussed later in the chapter.

The founder of Buddhism is Siddhartha Gautama (born c. 563 B.C.E.). He was a member of the warrior caste of ancient South Asia and was taught the traditions of Hinduism. When he was a child, his father sheltered him from the harsh realities of life. As a young adult he encountered disease, old age, and death for the first time; this left an indelible impression on his conscience. Siddhartha's acceptance of the Hindu doctrines of karma, reincarnation, and enlightenment led him to conclude that he would transmigrate through successive cycles of misery that could be broken only through personal liberation.

As a result, he set out on a spiritual journey that led to the creation of the world's largest spiritual non-theistic religion, which currently includes over 350 million followers worldwide. The story of how Siddhartha became the Buddha, or enlightened one, is well known. While meditating in the shade of a fig tree, also called the bodhi tree, he became liberated through a powerful mystical experience known as nirvana. For the next 40 years, Buddha developed the spiritual non-theistic doctrines that comprise the core of Buddhist concepts.

During the centuries that followed Buddha's death, Buddhism spread throughout the whole of Asia. As Buddhism expanded, it developed into two distinct branches: Hinayana and Mahayana. Hinayana is called the Way of the Elders because it adheres most closely to Buddha's original beliefs.¹⁰ While both branches accept Buddha's core ideas, Mahayana added many additional doctrines from the indigenous religions that it encountered during centuries of expansion throughout Asia.

Buddha developed his spiritual non-theism by reinterpreting Hindu doctrines. Contrary to the Hindu belief that the inner atman or soul is identical to the all-pervading Brahman or God, Buddha substituted the doctrine of *anatta*, or "no soul." He rejected the Hindu belief that there exists something called Brahman, or Cosmic Soul, that pervades the universe. For Buddha, only a non-theistic emptiness lies at the center of everything. There are no atmans struggling to return to Brahman through innumerable cycles of rebirth.

Buddha's no-soul and no-God teachings troubled Hindus, who challenged him to explain precisely what it is that reincarnates from one life form to another if there is no soul in anything because the ultimate reality within everything is nothing. In Buddha's view, the transmigrating entity is not a permanent soul, but rather a bundle of transitory energy called a *skandha*. As a result of rebirth, each energy cluster takes on a new human

form that includes physical features, consciousness, perceptions, emotions, and will.

Like Hinduism, the goal of Buddhism is release from the cycle of reincarnation through meditation, culminating in the mystical experience of nirvana that parallels the Hindu spiritual experience of moksha. However, unlike Hindus, who believe that moksha results in the atman's return to Brahman, Buddhists hold that nirvana leads to the complete cessation of the karma-driven, transient skandha that constitutes the self. After achieving nirvana and upon death, the self, which is only a transmigrating bundle of energy, disappears forever.

Once Buddha developed his basic non-theistic doctrines, he turned to the question of how to attain the goal of nirvana. This led him to expound the Four Noble Truths and the Eightfold Path. His First Noble Truth is that all life is suffering, which summarizes his earlier observations that all life moves inevitably toward disease, old age, and death. For the Second Noble Truth, he retained the Hindu doctrine that suffering is caused by attachment to worldly desire, which in turn leads to accumulating bad karma and reincarnation. In the Third Noble Truth, he asserted that there is a way to break from attachment to desire, suffering, and reincarnation. This way, the Fourth Noble Truth, is the Eightfold Path.¹¹

The pathway to nirvana that Buddha advocated is not a new doctrine of the nature of philosophical Truth. Quite to the contrary, it is a set of guidelines that the devotees of Buddha's way followed to duplicate the mystical experience that he had achieved under the bodhi tree. Buddha was convinced that the search for theoretical or rational certainty was itself a form of attachment that distracted from the goal of detaching from desire. The purpose of the Eightfold Path is to get to nirvana in order to stop the suffering that rebirth causes. Buddha's way consists of an applied program that enables practitioners to move progressively, step-by-step, toward spiritual enlightenment.

The pathway that leads to liberation starts with step one—right belief, which means accepting Buddha's Four Noble Truths along with his no-soul and no-God doctrines. Step two involves developing right motives or desire to see it through to the end. The interior steps three, four, and five involve Buddha's stress on right speech, conduct, and livelihood, which are designed to eliminate the internal tendency toward immoral behavior. Buddha believed that it was not possible to advance to the higher steps without first removing the inner stain of ethical impurity. The last three steps that culminate in nirvana are right effort, mindfulness, and meditation.

Even though Buddha disavowed belief in God and the soul, his non-theistic teachings do not lead to abandoning the pursuit of spiritual goals. Instead, Buddhist spiritual non-theism serves as the foundation for an alternative expression of human religiosity through which his followers find a deep spiritual core within the material conditions of life that leads to personal fulfillment.

Like Buddhism, the religion of Jainism combines spiritual mysticism with non-theism. Both religions emerged in ancient South Asia at about the same time in the sixth century B.C.E. as offshoots of Hinduism. However, even though both are non-theistic, unlike Buddhism's no-soul doctrine, Jainism affirms that each person possesses a unique and autonomous inner soul called *jiva*. The *jiva*, or soul, is hidden in the human body and differs from the Hindu notion that all souls are identical because they are merely "smaller pieces," so to speak, of the larger Cosmic Soul or Brahman. In Jainism, souls are separate, but they are not seeking to return to God because God does not exist. Rather, each soul is striving for release from karma and reincarnation in order to join with other liberated souls in a spiritual place of eternal peace called *loka*. *Loka* is like heaven—a place where individual souls dwell eternally in bliss and perfect knowledge.

The founder of modern Jainism is Nataputta, whom his followers called Mahavira, the Great Man or Hero. The religion of Jainism derives its name from the Sanskrit word *jina*, which means conqueror. Nataputta became the Great Hero Mahavira because he was the great conqueror or *jina* (Jain). What he conquered is so extraordinary that Jainism stands alone in the annals of the world's major spiritual traditions. In order to release his soul from rebirth, the Hero Mahavira starved himself to death to demonstrate his detachment from life's most basic craving for food and water. No doubt this explains why there are only 4 million Jains in the world, mostly in India, compared to nearly a billion Hindus and 350 million Buddhists.

Jainism is a religion of self-discipline that carries self-denial to an extreme. For Mahavira, the universe is organized hierarchically with good spirit at the top and bad matter at the bottom. It is populated by an infinite number of *jivas* or souls that are pure spirit. However, these pure spirits are trapped in matter and are struggling to become liberated from it. The *jiva* is prevented from rising to the top of the universe by karma, which Jains call *ajiva*. *Ajiva* is like sticky matter that weighs down the *jiva*. In order to get to *loka*, or heaven, each person must burn off the *ajiva* that sticks to his or her *jiva*, so that the *jiva* can rise to the peak of the spiritual universe.

Freeing the *jiva* from *ajiva* can be accomplished only through detachment from worldly cravings of all kinds, including the most basic necessities of life, nutrition and hydration. Simply stated, it is through self-denial of all material goods and goals (culminating in the refusal for food and water) that the soul burns off all its karma. As a result, the *jiva* or soul is released from all future bodily reincarnations and makes its ascent to the highest point in the spiritual universe, *loka*.

Thus, two of the world's major expressions of spiritual non-theism emphasize that life's primary goal is spiritual fulfillment. Even though both disavow belief in the existence of God, they split over whether or not there exists a soul that lies hidden beneath the physical body from which it must be liberated. Jains affirm that the soul exists, while Buddhists claim that it does not. In the realm of the religious and philosophical imagination, it is

only a small step to go from combining non-theism with spirituality to separating them. In this case, all that remains is non-theism, which is called atheism in the West. This separation has been greatly affected by the rise of modern science.

MATERIALIST-ATHEISM

As stated in earlier chapters, the impact that modern science has had in transforming the Premodern into the Modern world has been pervasive. Virtually every area of society has been changed in one way or another. Nowhere is this more evident than in the realm of religion. This does not mean that modern science has abolished or is about to abolish the world's great spiritual traditions that are spreading throughout the emerging global village. Religion in all its manifold forms is thriving around the planet and in most cases coexists quite harmoniously in regions where secularization has taken hold. Still the question lingers. What effect has modern science had on religion?

The answer to this question lies in what is often called the scientific worldview, which has left its mark on modernity especially in the form of a lively science versus religion debate that started centuries ago and continues into the present—and no doubt into the future as well. While advocates on both sides advance their arguments by either accepting or rejecting the modern scientific perspectives on the Big Bang or evolution, this debate would not even exist if it had not been for Newton's description of the universe as the big machine that does not need a God hypothesis to operate. The most basic assumption on which the modern scientific worldview rests, especially in its materialist form, is that the physical universe is comprised merely of matter and energy in many different forms, which come and go, and that it operates according to its own internal natural laws.

For materialist-atheism, no spiritual power of any kind is hidden inside the big machine. Neither the God of pantheism or monotheism nor the gods of animism-polytheism exist; there is no autonomous soul; there is no life after death; and there is no reality to a separate realm called spirituality. The universe and everything in it, including the human mind, can be explained, if not now then in the future as science progresses, in terms of the laws of nature, whether determinate or indeterminate, that grind along of their own accord. Furthermore, according to materialist assumptions, it is just as reasonable to assume that the cosmos has always existed as it is to imagine that it was created by some invisible spiritual power that acted behind the scenes.

When the ancient Roman Empire collapsed and medieval Christianity arose to take its place, the ancient materialist worldview of Democritus, as described in chapter 4, receded into the background. Christendom grew to dominate Western civilization for centuries. Through a synthesis of Greco-Roman philosophy and Judeo-Christian theology, the Church defined the

nature of the universe according to the biblical divine command theory, which placed humanity at the high point of God's seven-day creation. After lying dormant for centuries, materialism made a dramatic reappearance with the rise of modern science.

Because of modern science, a newer form of materialist-atheism re-emerged as a serious competitor to challenge the centuries-old spiritual traditions of pantheism, monotheism, animism-polytheism, and spiritual non-theism. Even though ancient traditions of spiritual non-theism such as Buddhism and Jainism have for centuries denied the existence of God, modern materialism goes one step further by denying the existence of anything spiritual. According to one source, even though roughly 80 percent of the world's population continues to embrace one of the many forms of religion as expressed above, atheists and nonreligious persons are now estimated to be about 20 percent of the world's population,¹² the highest percentage ever in human history.

This means that religion, like so many other areas of the modern world, has felt the impact of modern science. Unlike Premodern society, where nearly everyone accepted some variation of pantheism, monotheism, animism-polytheism, or spiritual non-theism, in the Modern world this is no longer the case. Now nearly one in five individuals looks at reality through the lens of a materialist worldview that leaves no spiritual space for God, the gods, the soul, or life after death. Whether this number will continue to increase, stabilize, or decrease during the 21st century and beyond is a question that can be answered only as the future unfolds.

CONCLUSION

What conclusions can be drawn from the above comparisons? To begin, just as no universal scientific consensus exists on the relationship between the brain and the mind, as described in the previous chapter, there is no agreement among the followers of the world's diverse religious traditions on how the perceived spiritual dimension of human experience is connected to the physical universe. The presence of multiple viewpoints is clear evidence that there is a lack of consensus on the nature of the spiritual world that the vast majority of the world's population assumes lies hidden within the big machine.

While pantheists agree with monotheists that there exists only one God, they are at odds over how to understand the relationship of God to creation. For pantheists, the physical universe is the body of God. For monotheists, the physical universe was created by God, who remains separate from it. Pantheists believe that knowledge of God is accessible to the human mind. Monotheists hold that knowledge of God is conveyed through God's special mediators to whom he has revealed the nature of divine will. Pantheists believe in karma and reincarnation and that each believer has multiple lives to achieve enlightenment. They also believe an individual's soul is a

part of the larger Cosmic Soul. Monotheists believe that each person has a separate soul, and they believe in a judging God who gives every person only one life to attain either heaven or hell.

Unlike pantheists and monotheists, spiritual non-theists do not believe in the existence of any kind of God or gods. However, they are split over whether or not the soul exists. For some, like Buddhists, what is called the soul is merely a bundle of karmic energy that transmigrates into successive physical forms and eventually dissipates forever into emptiness after a believer achieves the ultimate state of nirvana. For others, like Jains, each person possesses a separate and non-created eternal soul that keeps reincarnating until it becomes liberated from the dreaded cycle of rebirth.

Unlike pantheists and monotheists, who believe in one God, and spiritual non-theists, who do not believe in any God, animists and polytheists believe in multiple gods. These gods appear as spirits or souls that inhabit natural places such as clouds, valleys, oceans, mountains, and other sacred spaces. They can also be represented tangibly through the imitative behavior of shamans, iconic statues, wall paintings, friezes, and so on. They are perceived to exert a direct influence over human destiny and to determine an individual's fate for good or ill. Like the followers of all religions, animists and polytheists have devised multiple means for staying on the right side of the spirits or gods. These include prayers, ritualistic submission, manipulative magic, and many other methods that practitioners believe lead to being in harmony with the spirit world.

The above summary makes clear that in the realm of religion, the name of the game is diversity. While one of the many viewpoints might be correct, there is no way to demonstrate conclusively which one it would be. Just as skeptics, idealists, and realists continue to give expression to their diverse voices in the Modern world, so do pantheists, monotheists, animist-polytheists, and spiritual non-theists.

One of the Modern world's most dramatic transformations has occurred among individuals who reject the assumption that some form of spirituality lies hidden below the surface of the big machine. As narrowly interpreted, the scientific worldview reduces reality to what can be known through the rational-empirical methods of modern science. From the perspective of modern materialist-atheism, all forms of human religiosity are false views of reality. That is to say, despite the psychological comfort they bring their followers, all forms of religion—pantheism, monotheism, animism-polytheism, and spiritual non-theism—are illusory. For materialist-atheists, reality consists only of nature and its governing laws.

In sum, every citizen in the emerging global village will be immersed in this growing and diverse mix of religious and philosophical worldviews whose leaders and laity will be in competition to win the hearts and minds of individuals and groups everywhere on earth. Most of the time, the competition will go forward peacefully as the adherents of different positions seek to persuade others of their spiritual truths. At the same time, much of

the violence that has erupted around the world during the last two decades stems from religiously motivated hatred and hostility.

Developing a universally shared set of values that will enable people everywhere, whatever their faith, to learn how to live together peacefully in the midst of religious pluralism is clearly one of the major challenges facing the emerging global village. Where are these values to be found? This is the subject of the next chapter.

NOTES

1. Moojan Momen, *The Phenomenon of Religion: A Thematic Approach* (Boston: OneWorld Publications, 1999), p. 505, table 19.2.
2. "Chandogya Upanishad," in *The Upanishads*, trans. Swami Prabhavananda and Frederick Manchester (New York: Mentor Books, 1957), p. 46.
3. Books such as the Vedas, Laws of Manu, and the Bhagavad-Gita, found in the voluminous *Mahabharata*, comprise a few of the many sacred writings of Hinduism.
4. "Laozi: the *Daodejing*," in *Scriptures of the World's Religions*, ed. James Fieser and John Powers, 2nd ed. (New York: McGraw-Hill, 2004), p. 186, section 78.
5. *Ibid.*, pp. 185–186, sections 37, 63.
6. See Mark Allan Powell, *Jesus As a Figure in History* (Louisville, Ky.: Westminster John Knox Press, 1998).
7. Romans 3:9–6:23.
8. David S. Noss, *A History of the World's Religions*, 12th ed. (Upper Saddle River, N.J.: Pearson Education, 2008), p. 13.
9. Mary Pat Fisher, *Living Religions*, 6th ed. (Upper Saddle River, N.J.: Pearson Education, 2005), p. 209.
10. The Mahayana form of Buddhism is called the large vehicle. The original Hinayana form of Buddhism is found throughout Southeast Asia. The many Mahayana forms are spread throughout Japan, Korea, China, and other regions of Asia. Like Hinduism, all forms of Buddhism emphasize direct spiritual or mystical experiences as their ultimate goal. Even though the Mahayana forms differ in significant ways from Hinayana Buddhism, they all share this common feature. For additional information regarding the differences between Hinayana and Mahayana Buddhism, see Thomas R. McFaul, *The Future of Peace and Justice in the Global Village: Role of World Religions in the Twenty-first Century* (Westport, Conn.: Praeger, 2006), pp. 30–36, 86–90.
11. "The First Sermon," in *Scriptures of the World's Religion*, pp. 82–83.
12. Momen, *The Phenomenon of Religion*, p. 504.

CHAPTER 7

A Common Thread

The last chapter focused on the various ways in which the vast majority of the world's population, 80 percent or more, perceives some kind of spiritual essence to sit underneath the surface of the physical universe, which has been likened unto a Newtonian-type big machine. The modernization process is producing a worldwide web of mass communication that is spreading out in all directions on top of the earth's surface and driving the creation of the global village. Now that once-isolated homogeneous cultures are intermixing with each other more than ever, the need for a common value system that will help overcome traditional religious and other animosities is greater than ever.

This observation gives rise to an important question: Where is a shared value system that can lead to greater world harmony likely to be found? As this chapter will demonstrate, it runs like a common thread in the ethical tapestry of the world's diverse theological and philosophical worldviews described in the last two chapters. Underneath the dissimilar ways in which various religions perceive that a spiritual presence permeates the universe, there exists a common core of widely shared convictions regarding the nature of moral goodness. In addition, all of the major philosophies of the world include these values as well. With respect to the emerging global village, it is by building on this foundation of shared values that all of humanity, despite ongoing theological and philosophical differences, stands to benefit the most.

Since the last chapter centered on religious diversity, this chapter will start by examining the common values that cut across this diversity. It will then identify how some of the world's major philosophies encompass

them as well. In turn, this will help bridge the transition to the next two chapters, which examine many modern economic and political ideas that build on a strong philosophical foundation.

The best place to start any discussion of ethics is with definitions. Whether in the field of philosophy or religion, all conversations regarding moral behavior focus on one primary topic: pursuit of the “good.” However, they differ in their approaches. The main assumption behind all these conversations is that if everyone acts according to the highest standards of moral goodness, then the overall quality of life on earth will be enhanced. Furthermore, given the existence of human imperfections, there is no maximum point beyond which earthly life cannot be improved. As more individuals and groups progress in their moral treatment of each other, the better off society becomes for everyone.

Before describing shared religious and philosophical values, this brief introduction includes one more observation. Like religious worldviews in general, religious ethics ties morality to spirituality in one form or another. As will be discussed, for some religions, especially those expressions of monotheism that stem from Abraham (Judaism, Christianity, and Islam), goodness emanates from God, who conveys standards of right and wrong through revelation.

Philosophers differ from religious moralists by grounding their perceptions of the good in reason alone. While this does not necessarily imply disbelief in God, philosophy does not find it necessary to include a “God argument” in order to arrive at a position on universal values that will enhance overall human well-being. At the same time, religious moralists do not disavow the importance of rationality. Rather, they view it as a means of clarifying and communicating God’s moral mandates. Stated simply, these two approaches proceed from different assumptions. In general, philosophers do not believe there is a need to posit the existence of God in order to advance their views of goodness, whereas theologians set down their perspectives in terms of God’s revelations.

The remainder of this chapter will start with a discussion of how the monotheistic religions, as presented in the last chapter, use revelation to derive moral standards. Second, the moral views of pantheism and spiritual non-theism will be described. Third, these two approaches will be followed by a description of how rationalists develop their moral standards. Then, after finishing these three sections, the chapter will conclude by identifying the common thread of values that cut across all of them.

FROM GOD ON HIGH

For the world’s three major monotheistic religions of Judaism, Christianity, and Islam, morality emanates from God on high, who has revealed the universal standards of right and wrong that serve as a guide to human behavior. All three of these religions follow the same pattern in identifying

their standards. They perceive that God has chosen special mediators for the purpose of delivering divinely inspired moral commandments.

For example, in Judaism, God chose Moses to convey the Ten Commandments and the remaining laws that appear in the Torah, the first five books of the Hebrew Scripture that Christians call the Old Testament. Christians identify Jesus as the perfect Messiah-mediator sent by God to die for the sins of the world. The mediator parallel in Islam is Muhammad, who Muslims believe was chosen by God to recite perfect revelations. For all three of these revelation-based monotheistic religions, the question arises, "Why should we do this and not that?" The answer is straightforward: Because God requires it. When asked further, "How do we know this?" the answer is because (depending on the religion) God revealed it to Moses, Jesus, or Muhammad.

With the passage of time, the early followers of the monotheistic faith communities wrote down their special mediator's revelations and organized them into sacred scriptures for future generations to follow. The revelations of the three Abrahamic traditions are recorded in three well-known sacred texts: the Jewish Tanak, the Christian Holy Bible, and the Muslim Quran. When new religions arise, such as the 19th-century American Church of Jesus Christ of Latter-Day Saints, also known as Mormonism, new sacred scriptures are produced, like The Book of Mormon that Joseph Smith allegedly translated from secret golden plates.

In addition, the monotheistic communities legitimize their spiritual and moral claims by maintaining that God commissioned their mediators to reveal them. Each one tells its own story of how God called out and set apart from others their unique mediator for this special purpose. In Judaism, God spoke to Moses out of the burning bush, and later took him to the top of Mt. Sinai to give him the Ten Commandments. In the sacred Christian story, John the Baptist baptized Jesus in the Jordan River and a voice from heaven proclaimed him as God's beloved son. For Muslims, God sent the angel Gabriel to Muhammad and told him to recite the revelations that Muhammad's followers eventually compiled to create the Quran.

As the above discussion makes clear, the long term viability of the monotheistic religions rests on their followers' belief that God has chosen their special mediator to convey the commandments revealed in their sacred scriptures. In addition, all three of these religions look to history as an arena of divine activity through which God's ethical expectations become known. For example, Jews have long held that God chose them for a special purpose, not because they deserved it but because God loved them. God's promise to Abraham was that a worthy people—a great nation—would be created in his name and that the ancient Israelites would be given a promised land providing they remained faithful to the covenant that God made with them.

The well-known story of Israel's initial loyalty and later disloyalty to the laws of the covenant is recorded in the Jewish Scripture from the books of

Joshua through 2 Kings. When the Israelites remained true to their calling, God blessed them by creating a mighty nation that reached its zenith under Kings David and Solomon. Then when they grew negligent and disobedient, God punished them through national catastrophe and the Babylonian exile.

God's expectation of the ancient Israelites was that they were to become a righteous people—like a light on a hill for all to see and imitate. Israel's call was not to be a puffed up nation that glorified its divine election through a distorted sense of conceit and feelings of superiority. Their spiritual and moral mandate was to put their trust solely in God and not in themselves as the cause of their achievements. In short, the Jewish story as written in Scripture is that God charged them with the task of being a holy people. When they were faithful, God rewarded them. When they were unfaithful, God punished them.

The standards of holiness by which God judged the Israelites are stated clearly in their sacred Scripture as God revealed it to Moses and the other prophets. In addition to worshipping God alone, at its core the concept of holiness included the moral mandates by which God expected the Israelites to treat each other as well as their neighbors. There are numerous passages throughout the Hebrew Scripture that spell out these mandates. Through the eyes of the ancient storytellers who recounted the nation's rise to political power and subsequent downfall, the Israelites had only themselves to blame for their catastrophic collapse. They had ceased being a holy people.

Israel's standards of righteousness appear as three separate codes that are incorporated into the Torah. They are the Covenant (Exodus 20:1–23–33), Deuteronomic (Deuteronomy 12–26), and Holiness (Leviticus 17–26) codes.¹ The most general moral standards are the well-known Ten Commandments (Exodus 20:1–17), which provide a framework for more detailed prescriptions. The first four commandments relate to the Hebrew covenant with God and the other six with specific behavioral expectations such as honoring parents and prohibiting murder, adultery, theft, lying, and envy.

Other moral mandates deal with specific injunctions by which God expected the Israelites to conduct themselves during their interactions with others. Here are a few examples: "You shall not defraud your neighbor; you shall not steal; and you shall not keep for yourself the wages of a laborer until morning; you shall not revile the deaf or put a stumbling block before the blind . . . You shall not render an unjust judgment; you shall not be partial to the poor or defer to the great; with justice you shall judge your neighbor. You shall not go around as a slanderer among the people" (Leviticus 19:13–16).

As the ancient nation began to backslide in the direction of disobedience, numerous prophets arose and repeatedly reminded the nation of the moral mandates that stood at the center of their covenant obligations. During the corrupt regime of the Northern King Jeroboam II, Amos proclaimed to the

people, "Hate evil and love good, and establish justice in the gate" and "let justice roll down like water and righteousness like an everlasting stream" (Amos 5:16, 24). Later during the turmoil that affected the Southern Kingdom during the reign of Hezekiah, the prophet Micah reminded the Judeans that God "has told you, O mortal, what is good; and what does the Lord require of you but to do justice, and to love kindness, and to walk humbly with your God?" (Micah 6:8).

According to one source, from the start, the central-most ethical obligation of Judaism has been justice tempered by "a merciful and forgiving attitude." It is God's ongoing expectation that the Jews "should act in such a way as to establish *shalom*, 'peace and well-being,' among all people." All their actions "must be pervaded with *rahmanut* or compassion, a merciful attitude that rules out cruelty."² Even though the Jews repeatedly fell short of God's expectations and were judged for it, according to biblical writers, the moral standards that appear throughout their Scriptures, as summarized above, have guided their interactions with others groups whether in the promised land or away from it.

Christianity is the second of the great monotheistic religions. As is well known, all of the early followers of Jesus were Jews who saw in him the fulfillment of their ancient covenant with God. Long before the Church accepted the New Testament as authoritative at the end of the fourth century C.E., early Christians proclaimed that Jesus was the Messiah who had been foretold in the *Tanak*, the Hebrew Bible that Christians call the Old Testament. The moral mandates that the early Christians developed to guide their behavior as converts during the early decades after Jesus's death builds on the ethical foundation of the Jewish Torah.

From the start, Christians tied their understanding of morality to inward transformations that occurred when they accepted that Christ died for the sins of the world and recognized him as their personal savior. Since all of the initial followers of Jesus were Jewish, they used the Torah, especially the Ten Commandments, as the baseline for developing their own ethical attitudes.

No other early convert to Christianity contributed more to shaping the Church's view of Jesus as the long-awaited Jewish Messiah than Paul. He was especially skillful at starting with the ancient Torah standards, in particular the Ten Commandments, and taking them to the next level. For Paul, the greatest Christian value is the love that God reveals in Christ and that encompasses the entirety of the Jewish law. In his letter to the Romans he writes, "The commandments, 'You shall not commit adultery; You shall not murder; You shall not steal; You shall not covet,' and any other commandment, are summed up in this word, 'Love your neighbor as yourself.' Love does no wrong to the neighbor; therefore, love is the fulfilling of the law" (Romans 13:9–10). In his first letter to the Corinthians, Paul couples love with faith and hope and declares that while all three abide, "The greatest of these is love" (1 Corinthians 13:13).

Paul adapted the belief in God's eternal love for the Jews to his conviction that this love has been expressed supremely through the life, death, and resurrection of Christ. Anyone who lives as one of Jesus's followers becomes a transformed person who lives according to the inspiration of Christ's spirit, and who avoids the destructive ways of the flesh, which include "fornication, impurity, licentiousness, idolatry, sorcery, enmities, strife, jealousy, anger, quarrels, dissensions, factions, envy, drunkenness, carousing, and things like these" (Galatians 5:19–21).

As a result of the powerful conversion that occurs when a convert follows the example of Christ, he or she can put away the things of the flesh and begin living according to the fruits of the spirit. In addition to love, these include "joy, peace, patience, kindness, generosity, faithfulness, gentleness, and self-control" (Galatians 5:22–23). From the time of the New Testament and down through the centuries, other Christian writers have built on Paul's early theological and ethical ideas by adding their own nuances and elaborations, especially with regard to the core values that comprise the Christian moral life.

The third and last of the three Abrahamic religions is Islam. Like its two monotheistic predecessors, Islam is based on God's revelations from on high. The principal difference, of course, is that Muslims believe Muhammad stands as the greatest of God's chosen intermediaries, even though the Quran acknowledges that God chose both Moses and Jesus as important prophets in their times. Muhammad stands at the end of a long line of mediators and is recognized as the last or seal of the prophets.

Many parallels exist between the moral standards of Judaism, Christianity, and Islam. Every one of the Quran's main chapters, called Sura, begins by acknowledging that God, or Allah, is merciful and compassionate. Sura 3:104 calls upon all Muslims to do what is good and avoid what is evil. All specific ethical injunctions follow from this general guideline. Like Judaism, of greatest importance are actions that are intended to produce justice. According to Sura 4:58, "Allah commands you to fulfill your trusts to those to whom they (your trusts) are due; And when you judge between man and man, that you judge with justice. Surely how excellent is the teaching that He (Allah) give you."

Like Paul before him, Muhammad counseled his followers to avoid such sinful behaviors as lust, greed, anger, murder, arrogance, and sexual misconduct outside of marriage, among others. He advocated that his followers embrace with heart, tongue, and deed those thoughts and actions that lead to the highest levels of morality. These include faithfulness to God, hospitality to strangers, loyalty, honor, and self-control. In 632 c.e., the year of his death, Muhammad delivered a farewell sermon that called for returning property taken unfairly from others, avoiding harm to others, not charging interest on money loaned to others, fostering marital love between husbands and wives, and not committing adultery.

Paralleling the teachings of Judaism and Christianity, Muhammad recognized the importance of the golden rule. He held that to be a faithful Muslim, every believer had to desire for his brothers and sisters what he desired for himself. Thus, as the above examples make clear, the degree of overlap that exists among many of the major moral injunctions of the three monotheistic religions is substantial despite their theological and scriptural differences. Can the same be said for the pantheistic and spiritual non-theistic traditions that arose in South Asia?

FROM INSIDE THE SELF

In contrast to the revelation-based religions of Judaism, Christianity, and Islam, which ground their moral commandments in God on high, non-revelation religions like Hinduism, Buddhism, and Jainism look inside the self in order to find the spiritual roots of moral goodness. Since the two younger faiths of Buddhism and Jainism have their origins in the ancient spiritualities of Hinduism, the proper point of departure for examining the moral traditions of all three of these South Asian religions is Hinduism. Once the major moral themes of Hinduism have been examined, they will be compared with those of Buddhism and Jainism in order to determine areas of overlap.

Unlike Christianity and Islam, Hinduism has no single founder whose followers anchor their moral mandates in revelation. Instead, this ancient South Asian faith is comprised of the collective contributions of multiple, anonymous, and inwardly enlightened sages. Students of the Hindu religion, which is also called *Sanatana Dharma*, or eternal religion, have long recognized that the divine spirit dwelling within the universe takes many forms by being manifest in millions of objects and living creatures. God is everywhere and in everything.

In addition, the central Hindu belief, namely, that there is one Truth and many paths to it, provides believers with multiple ways of connecting to the ultimate source from which everything arises and to which it eventually returns. As stated in the preceding chapter, the combined themes of reincarnation, karma, dharma, detachment, and enlightenment run through all the nuanced variations involved in Hinduism, as well as Buddhism and Jainism. Breaking free of *samsara*, the continuing cycle of rebirth, is the ultimate goal of all devout Hindus. This occurs when the soul completes its journey back to God.

The broad theme of spiritual return from which all the pathway variations are derived is layered with the doctrines of caste and life-cycle duties. Hindus also emphasize the importance of self-control, intelligence, and spiritual devotion to one of the many avatars, or manifestations, of God, who appears in many forms to help the soul transmigrate to its final destination.

These combined beliefs give rise to one of Hinduism's central moral principles, called *ahimsa*, or "do no harm."

The word *ahimsa* carries the connotation of nonviolence toward all the living beings of the earth. This includes humans and nonhumans alike. The commitment to vegetarianism stems from this central ethical belief. Hindus hold that when any earthly creature is killed, its soul is deprived of the opportunity in that life form to continue to make progress toward the day of its liberation from the cycle of birth, death, and rebirth. While some forms of killing are acceptable, especially defensive combat by members of the nobility or warrior caste, called *Kshatriya*, the norm of nonviolence dominates the Hindu understanding of the central moral obligation that individuals have toward each other as well as the earth as a whole.

Along with their deep commitment to nonviolence, Hindus also embrace closely connected moral standards. According to the best-known of all Hindu sacred texts, The Bhagavad Gita, "The virtues of heaven are for liberation but the sins of hell are the chains of the soul" (16:5). These chains consist of "the gate of lust, the gate of wrath, and the gate of greed" (16:21). Believers are counseled to turn away from destructive vices and instead strive for "humbleness, sincerity, harmlessness, forgiveness, uprightness, devotion to the spiritual master, purity, steadiness, self-harmony" (13:7). Virtue leads the soul to inner peace. When a person's "soul is in peace he is in peace, and then his soul is in God" (6:7).

Buddhism builds on these basic beliefs. At its core, Buddhism is one of the most ethical religions on earth. Its central norm of compassion derives from Buddha's First Noble Truth that all life is suffering. In both the Hinayana and Mahayana branches, the followers of the Buddha's wisdom strive to alleviate the afflictions of disease, old age, and death that the cycle of life imposes on all individuals. The hope of nirvana provides Buddha's devout adherents with the positive expectation that they will one day climb the spiritual ladder that leads to liberation and ultimate bliss.

While on earth, members of the Buddhist faith strive for peace of mind and an inner tranquility that allows them to rise above earthly contentions while still participating fully in the many challenges that appear at every stage of life. Buddhism stresses the importance of avoiding attitudes and behaviors that limit progress toward spiritual liberation or, at their worst, are destructive of self and others. These include anger, gossip, boasting, useless quarrelling, and the insatiable craving for power, security, or sensuality.

In order to escape the entrapment caused by detrimental attachments, Buddha laid down several precepts that prohibit destruction of life (*ahimsa*), stealing, or lying, among others. In his Eightfold Path, he counseled his followers to engage in right speech, conduct, and livelihood as essential moral stepping stones to the ultimate goal of nirvana. Many of Buddhism's moral teachings appear in the well-known sacred text called Dhamma-

pada, which says, "Hate is not conquered by hate; hate is conquered by love. This is a law eternal"; "Many do not know that we are here in this world to live in harmony. Those who know this do not fight against each other"; "Better than a thousand useless words is one single word that gives peace"; "Forsake anger, give up pride. Sorrow cannot touch the man who is not in the bondage of anything" (4–6, 100–103).

As the Mahayana branch of Buddhism emerged out of the original way of the elders, called Theravada or Hinayana, it developed the oath of the Bodhisattva to capture the core of the Buddhist commitment to compassion. The reincarnated savior figures called Bodhisattvas vow to take on the burden of all suffering, to set all beings free from the agonies of birth, old age, sickness, death, rebirth, and moral offenses of all kinds, to rescue all beings from the stream of samsara, and to finally bring all beings to their own liberation through the achievement of nirvana. Then, and only then, will the kind and loving Bodhisattvas consider their personal journeys through countless reincarnations complete.

Jainism joins with both Hinduism and Buddhism in affirming the centrality of the ahimsa or harmlessness norm. More than either Hinduism or Buddhism, Jainism emphasizes that the path to spiritual liberation lies in detachment from worldly desires, which are the primary cause of accumulating negative karma. Earthly attachments crowd out the capacity to concentrate on what really matters with regard to the pursuit of spiritual liberation from the cycles of rebirth.

In contrast, detachment opens up for the individual greater possibilities for nurturing the kinds of values that Jainism believes lead to personal and social tranquility. Jagdish Prasad Jain, who heads the New Delhi Jain Mission in India, summarizes the relationship between the virtues that enhance moral behavior and those that diminish it: "The virtues of humility, honesty or straightforwardness and purity of mind, including freedom from greed, are dovetailed into forgiveness. One is asked to renounce or minimize the four passions of anger, pride, deceit and greed, which are the real enemies of the purity of the soul and which stand in the way of peace and happiness of the individual as also social well-being."³

Thus, in combination, like the three Abrahamic religions that arose in the Middle East, three of South Asia's most enduring spiritual traditions, Hinduism, Buddhism, and Jainism, converge in their acceptance of common ethical standards that can steer the world toward greater peace and harmony. Whether these shared values originate from God on high through revelation or from spiritual knowledge that emerges inside the enlightened self, all six lay claim to many of humanity's most enduring moral insights. Given that these religions arose in different parts of the planet and in highly diverse cultural settings, their degree of overlap is remarkable to say the least. Can the same be said for ethical ideas that are not grounded in any of the world's great religions, but which instead emerge out of philosophical traditions that rely on reason alone?

FROM INSIDE THE HEAD

In contrast to religious understanding of morality, philosophers hold that norms of right and wrong can be established solely through rationality. Among the many moral pathways that philosophers have followed, four stand out above the rest: utilitarianism, rights, justice, and virtue or character approaches. After these four have been described, the chapter will conclude with a comparison of the moral concepts espoused by both theologians and philosophers. In turn, this will lay the foundation for a discussion of the economic and political issues that appear in the next two chapters.

Utilitarianism begins with one question: Is there a common good that unites humankind? Utilitarianism contends that there is, pointing to the pursuit of happiness, which is defined as maximizing pleasure and minimizing pain, as a common good. Pleasures are not limited to physical or tangible gratifications, but also include intangible ones as well, such as friendship, the enjoyment of beauty in nature and art or music, travel, photography, competitive accomplishments, love of family, the excitement of new adventures, inner calm and social peace, and so on. It was Jeremy Bentham and John Stuart Mill⁴ who developed the main ideas that comprise the core of modern utilitarian philosophy. They were united in their perception that all people everywhere are driven by the same desire: to experience the greatest amount of satisfaction that life on earth and life after death, however conceived, have to offer.

Utilitarianism focuses mainly on the consequences of behavior and not on motives. It affirms that goodness varies in direct proportion to the amount of happiness, that is, pleasure, that people are experiencing at any given moment and over time. If happiness increases, so does goodness. If happiness decreases, then goodness decreases. The classic formulation of this relationship is “the greatest good for the greatest number.” In simple terms, utilitarianism’s main goal is to increase goodness in society by increasing the total sum of happiness, which also goes by the word utility.

While this vision of the “good” sounds simple, in practice it is not for the following two reasons. First, the followers of utilitarianism disagree about the best means for increasing happiness; second, critics maintain that utilitarianism is unsustainable as a moral philosophy. In the first case, utilitarian advocates are divided in how to best achieve the goal of increasing overall individual and social happiness. One group focuses on specific acts, and the other on rules. Act utilitarianism accepts rules or norms as important guidelines for moral behavior, but also maintains that none are absolute and all can be suspended if necessary.

This means that in any given situation, standards of moral conduct may or may not be relevant to increasing goodness. Every moral dilemma involves alternative ways to respond. For an act utilitarian, the response that results in the best consequences for the situation, that is, the act that leads

to the greatest amount of happiness, is the right moral choice. While it is commonly assumed that lying, stealing, and killing are not morally desirable behaviors because of the bad consequences they produce, it might be necessary in some situations to engage in any or all of them, as for example in the case of lying to divert the attention of a would-be killer or stealing bread in order to feed impoverished children.

All this sounds reasonable, but according to the proponents of rule utilitarianism, it often happens that an act utilitarian will suspend moral standards in order to justify narrow self-interests, such as athletes who take illegal substances to enhance their performance, lie about it, and then rationalize their behavior by claiming that they contribute to the fans' enjoyment of the game. The assumption is that (1) more spectators will be happier watching topnotch athletic achievements, (2) more athletes will be happier doing them, and (3) owners will be happier making more money.

If the end justifies the means, say the critics, then lying can become the norm because it supposedly serves the goal of creating more happiness across a broad range of situations. However, while overall happiness might increase in the short run in certain situations, in the long run a growing pattern of lying produces more bad than good consequences for the greatest number for the following reason: lying creates distrust, which over time leads to a decline in both personal and social happiness, that is, goodness.

For the rule utilitarian, it is preferable to consistently adhere to moral standards, such as "don't lie," irrespective of selective contexts. While this might lead to less happiness in the short run in some specific situations, in the long run it is more desirable, because telling the truth creates trust, which generates the greatest amount of happiness for the greatest number of people. This can be said for other moral standards as well, such as "don't murder," "don't steal," "don't intentionally harm others," and so on. In a nutshell, the greater the adherence to a broad range of moral norms or rules, the greater is the chance of increasing both short- and long-term goodness.

In addition to the dilemmas confronting act and rule utilitarianism, critics claim that any moral philosophy based solely on the pleasure principle is fatally flawed for the following reason. If discriminating against any group, such as a minority group, increases the overall pleasure of other groups, especially the majority, then there is nothing inherent in utilitarianism per se that would prohibit such behavior. Slavery, torture, murder-genocide, Nazi medical experiments, and all manner of heinous acts of brutality against any given vulnerable population are potentially acceptable if such behavior increases the overall happiness of the greatest number of people.

In other words, say critics, utilitarianism lacks universal credibility if it is possible for any given group to justify increasing its own happiness by depriving other groups of theirs. Thus, any moral philosophy that seeks to define the good based on the pleasure principle alone ought to be discarded. Does this mean that utilitarianism, as a philosophical approach

to determining the nature of moral goodness, is inferior to the religious positions described earlier? The answer is no. Just as the moral standards that emanate from religious worldviews overlap each other, so do those that are based on reason alone. The strength of utilitarianism is its vision of universal happiness, which becomes even more compelling when it is supplemented with ideas that are associated with ethical principles based on rights.

Rights-centered morality starts from a different position. Unlike utilitarianism, which looks to consequences as the basis for determining the nature of goodness, the proponents of the rights perspective emphasize motives. This does not mean that the two stand in opposition. Rather, they complement each other. More than any other philosopher, it is Immanuel Kant who laid the philosophical foundation for a contemporary understanding of rights, just as he did in support of modern science and the Newtonian view of the universe as a big machine.

Kant believed strongly that when individuals act according to the right motives, the moral outcome for society as a whole improves. In other words, good consequences emerge automatically out of good motives. He explained his position by using two main ideas. The first is duty, and the second is good will.⁵ The brief saying, "Nothing is good but the good will," captures well the essence of Kant's position. Morality depends on the orientation of the will, because it is from this source that both good and evil actions arise.

Kant's reasoning is straightforward and follows deductively through concepts that he connects to each other. Here is the logic. The good will does its duty. Duty consists of following the universal moral law. The universal moral law is the categorical imperative. The categorical imperative has two main versions. The first is that in any given situation, an individual ought to universalize the maxim, that is, the motive, of his or her actions. The second version of the categorical imperative concerns how people should relate to each other. According to Kant, individuals should treat each other as ends in themselves and never merely as means.

Despite the technical language, the categorical imperative refers to the golden rule that appears universally in one form or another in all of the world's religions and philosophies. The golden rule also is called the universal reciprocity norm. It is well known: Do to others what you would want them to do to you. When expressed in a negative form, it goes by the name of the silver rule: Do not do to others what you do not want them to do to you.

Ample examples are readily available to illustrate both the golden and silver forms of the rule. Wanting to be helped in a time of need means that one should help others in their times of need. Because one does not want to be deceived, a victim of theft, or willfully harmed, one should not lie, steal, or deliberately victimize others. In other words, when individuals live by the golden or silver rule, the moral consequences for society improve auto-

matically. Or stated in the language of Kant, morality is enhanced when the good will does its duty by acting according to the universal moral law, called the categorical imperative.

In many ways, Kant's focus on acting by motives that can be universalized parallels the rule utilitarian emphasis on the importance of adhering steadfastly to universal norms of conduct. For the rule utilitarian, following moral rules consistently leads to consequences that increase goodness throughout society as a whole, even though in some exceptional circumstances obeying the rules might lead to more momentary unhappiness than happiness. For Kant, good consequences result naturally from right motives. For the rule utilitarian, pursuing the goal of good consequences implies obedience to universal rules. Either way, the outcome is the same.

Thus, it is not necessary to replace a philosophical ethic based on consequences with one that emphasizes motives. While exceptions exist, it is generally true that good motives lead to good consequences, and good consequences rest on good motives. This means that utilitarian and rights perspectives complement each other. In addition, utilitarianism is not fatally flawed just because it is based on the pleasure principle. When utilitarianism is coupled with the Kantian notion that everyone ought to live by the categorical imperative, that is, the golden and silver rules, then no individual or group ought to pursue happiness by depriving others of theirs. Everyone has a right not to be harmed just as everyone has the right to seek satisfaction amidst the wide ranging opportunities that life has to offer.

Next is distributive justice; and just as the Kantian approach to rights enhances the utilitarian's pursuit of happiness, the theory of justice complements the positions of both utilitarianism and rights morality. Justice deals with the distribution of life's burdens and benefits in a way that leads to maximum fairness for all. The main focus of justice is on resolving the challenge of who gets what and why in society. Philosophers whose writings center on justice search for universal criteria that define how and why all persons ought to get their due. In this way, ethical inquiry that focuses on justice complements utilitarian and Kantian morality by stretching beyond the interests of individuals. The concern for fair distribution encompasses society as a whole.

On the surface, this sounds simple. However, identifying universal criteria for determining how to fairly distribute both the burden and benefits of society is anything but easy. For centuries, starting with Plato's social hierarchy ruled by philosopher kings, moralists have disagreed about the ethical standards by which everyone should get his or her due proportion of social goods. It is not the purpose of this chapter to compare and contrast these many points of view. Rather, the ideas of only one writer will be discussed. John Rawls (1921–2002) is arguably one of the most important political philosophers of the Modern world, and his ideas set the standard for thinking about the nature of justice during the last half of the 20th century.⁶

Rawls coined the phrases “the original position” and “veil of ignorance” to describe his method. His intent is to create a theory of justice from scratch by imagining what it would be like to start society all over again as if current social, economic, and political conditions do not exist. The goal is to establish a set of principles regarding the fair distribution of social goods to which everyone could agree. In the original position, society is made up of people with an ordinary range of different aptitudes, talents, and abilities.

Under the veil of ignorance, no one knows where he or she will end up in the give and take of social interaction over time. Some will become rich, others poor; some will be happy, others sad; and so on. Through this method, Rawls’s aim is to establish the justice rules by which the game of life ought to be played. This means that everyone will have an equal chance to realize his or her full human potential even though the outcomes will allow some to be more successful than others (i.e., unequal to others). Then, under the condition of inequality, only two important questions exist. Are the inequalities just or unjust? How is this to be determined?

Rawls answers these questions with two main standards against which any society can assess whether or not all its citizens are treated fairly. They are the liberty and the difference principles. Because they are universal, both of these principles are an extension of Kant’s notion of the categorical imperative, the golden and silver rules. According to the liberty principle, “Each person is to have an equal right to the most extensive total system of equal basic liberties compatible with a similar system of liberty for all.” In other words, the rights that one person enjoys, all persons should enjoy. In this way, everyone has the freedom to achieve at the highest level possible without restraints imposed by artificial barriers that interfere with the expression of liberty.

Examples of such unwarranted interference include discrimination based on race, religion, sex, sexual preference, age, nationality, ethnicity, or other demographic characteristics that have nothing to do with an individual’s potential for optimal self-realization. In other words, metaphorically speaking, everyone should have the opportunity to begin the long-distance race of life at the zero yard line. While in reality this is not the case, every society should strive continually to move in this direction by eliminating artificial barriers to individual achievement wherever they exist.

Rawls’s second principle, the difference principle, recognizes that inequalities are an inevitable outcome of differential accomplishments in virtually all social arenas, such as economics, politics, culture, education, sports, music, art, science, mathematics, engineering, genetics, and so on. While the liberty principle fosters equal opportunity for all, the difference principle acknowledges that every society will experience an inequality of outcomes as different individuals end up with unequal achievements. The only question is, “Are these differences or inequalities fair?”

According to Rawls, two measures can be used to determine whether any given society’s inequalities are just or unjust. First, social inequalities

are just if everyone benefits, especially the least advantaged members of society, and, second, if equality of opportunity continues to remain open to everyone. Rawls recognizes that through the expression of liberty, some individuals will end up in superior positions relative to others. This might or might not be fair. The vulnerability of the liberty principle is that it could lead to the extinction of universal liberty by individuals whose achievements result in excessive control or domination of everyone else.

Stated differently, the liberty principle runs the risk of becoming the “take advantage of others unfairly” principle if some members of society harm others in the process of competing to achieve at the highest levels of success. This is why a difference principle that applies to the whole of society is a necessary counterweight to the liberty principle, which promotes and protects individual initiative. Rawls’s two main principles balance the individual-society polarity that was discussed in chapter 3. They guarantee individual rights and identify the conditions of justice that lead to distributing social goods in such a way that everyone benefits over time.

In addition, according to Rawls, there is no precise formula for determining who gets what and why in any given social distribution. Rawls’s principles serve as guidelines around which numerous social arrangements can be created across different societies. However these arrangements are constructed, if they protect individual liberties while benefiting everyone, especially the least advantaged, and also maintain equality of opportunity for future generations, then they are just. To the extent that any society changes in the direction of expanding individual opportunities while making sure that social inequalities are fair, then over time that society becomes more just. In short, a society that protects rights and advances justice for all is one that is, in all probability, also happier.

The fourth, and last, of the rational approaches is virtue or character ethics, which represents the culmination of the other three philosophical viewpoints. This approach to identifying universal morality does not emphasize carefully conceived abstract principles, but instead concentrates on the person as a moral agent. The strength of this method lies in its ability not to separate itself from the others, but rather to integrate their strong points.

For centuries, moralists from a wide range of cultures have contributed to the development of virtue-based ethics. Here are three examples. In ancient China, Confucius created an entire system of personal and social virtues that for centuries served as the basis for organizing Chinese society. Furthermore, it is currently undergoing renewed interest in modern China’s post-Mao era. Among the ancient Greeks, Aristotle advanced his idea of the golden mean as the central concept of virtue. The golden mean is not the same as the golden or silver rule.

Aristotle held that the best moral response in any given situation involves avoiding the extremes of excess or deficiency. In those situations that call for courage, he held that an individual should avoid the coward’s reaction

of nonaction as well as the zealot's response of disproportionate overreaction. The rightly courageous person knows how to respond in any given situation according to the golden mean in order to eliminate harm altogether or to keep it to a minimum.⁷ During the 13th century c.e., Thomas Aquinas borrowed extensively from Aristotle in adapting virtue theory to Christian theology.

While there are many Premodern and Modern expressions of the virtue approach to moral reasoning, all of them share similar characteristics. They emphasize the importance of character development. They start by defining virtue as a character trait that is desirable for a person as a moral agent to have. On the flip side, a vice is a trait that is undesirable to have. As a positive character trait, a virtue enhances moral behavior, whereas a vice undermines it. Virtuous persons act in ways that morally improve society, whereas those who live by vice morally degrade it.

Virtue ethics examines an individual's inner moral dispositions out of which actions arise, cutting across a broad range of situations. Virtue moralists look at persons as self-determining moral agents who shape the future through behavior that emanates from desirable character traits. Virtuous people will act habitually in one way only—virtuously. Stated simply, good thoughts and actions spring from good people.

Learning to be a virtuous person involves a lifetime of continual reinforcement of positive character traits. No self is born with a comprehensive set of virtues wired into the brain, but instead becomes virtuous through lifelong social learning and development. The only question is: What character traits are desirable for a person to internalize over the span of a lifetime? In answering this question, virtue ethics integrates the strengths of the three other philosophical branches.

For example, it is morally desirable to seek happiness for oneself as well as others in order to increase the greatest amount of good for the greatest number of people. Ultimately, this means expanding the circle of happiness to include everyone and not just the majority. Also, from the standpoint of Kant's emphasis on motives, a positive character trait involves respect for universal rights (Rawls calls them liberties). In addition to the virtue of respect, other desirable character traits include honesty, trustworthiness, loyalty, fairness, kindness, compassion, love and forgiveness, mercy, and ultimately searching for and living by the Truth in Freedom.

In short, the principles held by other philosophical schools of morality become included among the major character traits of virtue ethics, along with many more. It is the virtuous person who integrates abstract moral standards into his or her character and who acts virtuously through them. Fair persons treat others fairly, respectful persons relate to others respectfully, and honest persons deal with others honestly. Virtuous persons do not reinvent themselves with each new situation, but instead act virtuously and consistently over time and across a wide variety of situations.

Even though different virtue moralists emphasize some traits more than others, all of them agree that developing desirable character traits is the key to improving the moral condition of society. In this way, a virtue or character approach to ethics does not merely complement the other three types of morality in the same way that the latter complement each other. Character ethics builds on and at same time goes beyond utilitarianism, rights, and justice by combining their main strengths while incorporating other essential virtues as well.

CONCLUSION

Several overarching conclusions emerge from the above comparison of religious and philosophical approaches to pursuing the good. Some ethicists receive their universal moral principles through revelation. The followers of Asia's spiritual traditions turn to the spiritual side of the self to find their eternal values. Philosophers discover universal moral truths through the use of rationality. Despite their diverse starting points, in combination they all end at the same destination. That is to say, their combined contributions reinforce each other at the most fundamental level of identifying those values that produce the highest possible level of personal and social goodness.

All agree on one issue. In the final analysis, virtuous behavior flows from persons as moral agents, or, stated simply, people everywhere do not just have values, they live them. In order for any society to continue growing in goodness, sooner or later everyone must internalize the highest moral standards by which individual are expected to act and through which every society has to determine who gets what and why. This applies to both religious and philosophical approaches, irrespective of whether moral values come from God on high, from inside the spiritual self, or from inside the rational head.

In combination, there is convergence among all the ethicists discussed in this chapter despite the religious or philosophical worldviews that serve as their points of departure. Together they emphasize virtues such as compassion, concern for the poor and disadvantaged, mercy, love, caring, forgiveness, peace, generosity, not doing harm, courage, integrity, tolerance, honesty, truthfulness, justice, and many more positive values. In the final analysis, a society's moral foundation develops and deepens when its members live by these virtues, and it deteriorates when they do not.

In sum, the quality of moral life that will emerge throughout the remainder of the 21st century and beyond will depend on the extent to which the world's population, which holds diverse religious and philosophical worldviews, can transcend, not abandon, their deeply held differences and at the same time consciously choose to live by these values. The ways in which these values appear in both economics and politics will be the subject of the next two chapters.

NOTES

1. For an elaboration of these three codes, see Thomas R. McFaul, *Transformation Ethics: Developing the Christian Moral Imagination* (Lanham, Md.: University Press of America, 2003), pp. 65–69.
2. Arnold D. Hunt and others, *Ethics of World Religions*, rev. ed. (San Diego, Calif.: Greenhaven Press, 1991), p. 36.
3. Jagdish Prasad Jain "Sadhak," "Forgiveness: Its Nature and Significance," *Hindustan Times*, September 8, 2006.
4. Jeremy Bentham, *The Principles of Morals and Legislation* (Oxford, 1789), and John Stuart Mill, *Utilitarianism* (Indianapolis: The Bobbs-Merrill Co., 1957) are generally recognized as the two writers who laid the foundation of modern utilitarianism.
5. Immanuel Kant, *Groundwork of the Metaphysics of Morals*, trans. H. J. Paton (New York: Harper & Row, 1964).
6. John Rawls, *A Theory of Justice* (Cambridge, Mass.: Belknap Press of Harvard University, 1971).
7. See Aristotle, *Nichomachean Ethics*, 8th ed., trans. F. H. Peters (London: K. Paul, Trench, Tubner & Co., Ltd., 1888); Confucius, *The Analects*, trans. D. C. Lau (New York: Dorset Press, 1979); Thomas Aquinas, *Treatise on the Virtues*, trans. and ed. John Oesterle (Englewood Cliffs, N.J.: Prentice-Hall, 1993); J. D. Wallace, *Virtues and Vices* (Ithaca, N.Y.: Cornell University Press, 1978); Alasdair MacIntyre, *After Virtue* (Notre Dame, Ind.: University of Notre Dame Press, 1981); Michael Slote, *From Morality to Virtue* (New York: Oxford University Press, 1992); and Christina Sommers and Fred Sommers, eds., *Vice and Virtue in Everyday Life*, 4th ed. (New York: Harcourt Brace College Publishers, 1997).

CHAPTER 8

Bulging Pockets

This chapter examines one of humanity's oldest and most earthy struggles: the pursuit of economic well-being. At a minimum, economic well-being involves security from starvation. In many ways, this pursuit is the bottom line underneath all other endeavors. Satisfying the need for food and water is the essential prerequisite without which every form of biological life would cease to exist. Anyone who has gazed upon the emaciated body of a starving child anywhere in the world knows painfully well the horrible tragedy of not satisfying this most basic need.

How do Truth and Freedom connect to the issue of economic well-being? In order to answer this question, it is necessary to define key terms. In the most formal sense of the word, economics refers to the production and distribution of goods and services, which every society must accomplish successfully in order to survive. It is the task of economists to examine and compare various types of economic systems and processes to determine which ones benefit society the most. Those societies that do this best, and continue to do so, increase their long-term potential for survival and adaptability. In other words, there is a real-life, down-to-earth Truth about economic systems, and it is this: some are better than others. The purpose of this chapter is to identify those that history thus far has demonstrated empirically to be superior to others.

PREMODERN TO MODERN TRANSITION

As a general rule, ideas and institutions emerge within specific epochs, during which they reach their height of influence and then decline or

become modified as social forces move in new directions. This is especially true of economic systems that evolve, become modified to meet changing circumstances, and even go out of existence. In simple terms, they are creatures of history and social contexts. When cultural and historical patterns change, the dynamic operations of economic systems also change.

Nowhere is this more evident than in the economic changes that occurred during the transition from Premodern to Modern society. For centuries, the dominant pattern of societies everywhere around the earth was political feudalism supported by an agrarian economic system. The vast majority of people lived as serfs and worked under conditions of agricultural servitude. They labored on land that relatively small and wealthy groups of royal elites owned and governed as political fiefdoms.

As pressures for change began surfacing in the Premodern regions of the world, especially in Europe, several irreversible transformations made their first appearance in history. One of the most important involved the development of technological innovations that spawned the factory system, which in turn produced shifts in population distribution. As Premodern agrarian forms of economic production gave way to modern industrialism, peasants who labored under the constraints of the ancient feudal system migrated in large numbers to growing urban centers in search of work. Factories became the magnets of changing demographics. As the number of factories increased, the number of people who were drawn to them also increased.

As the transformation from Premodernism to Modernism continued unabated, the masses of rural-to-urban migrants became caught between a disappearing stable society and one that offered only stressful insecurity. The timeworn agrarian patterns, which defined everyone's taken-for-granted economic position, were giving way to an emerging, modern, industrial-urban structure that caused enormous confusion. Old traditions disappeared as new ones took their place. No area of society remained untouched by the powerful innovations that the modernization process produced. This applies especially to the realm of economics.

In the middle of this mighty transformation, many anxious observers began to question whether the new and seemingly unstoppable industrial system held a superior high ground over the agrarian pattern it was replacing. Enormous debates raged over whether it was better to return to the old or embrace the new. Some responses were extreme. For example, during the early 19th century, a group headed by Englishman Ned Ludd smashed machines to protest industrial innovations that were being implemented in the wool and cotton mills. It took two years, from 1811–1813, before the British military finally quelled their campaign of rampage and destruction. Even now, the image of Ludd and his movement symbolizes protest against the powerful forces that Modernism unleashed on the world.

MAKING THE CASE FOR THE MARKETPLACE

Despite the pockets of resistance that surfaced in response to the dynamic changes that eroded Premodern society, the broader trend toward Modernism steadily gained momentum. As new patterns began to crystallize, the fog of economic uncertainty began to dissipate. It was in the midst of widespread anxiety that two authors, in particular, laid down a foundation of positive expectations that the economic future unfolding before their eyes would be vastly superior to the narrow agrarian system that was fading. They are John Locke (1632–1704) and Adam Smith (1723–1790). Together, their ideas laid down the theoretical foundation of the modern marketplace.

Locke's main contribution lies in justifying the ownership of private property. His ideas appealed especially to the growing class of property owners who stood opposed to the feudal system that put land ownership under the control of a relatively small number of nobility who handed it down to their descendants. In particular, three interrelated ideas grabbed the imagination of this emerging class. The first is the state of nature, the second natural rights, and the third Freedom.

As described in chapter 3, Locke believed that the primordial human condition is the state of nature. During this pre-social primordial state of being, every person enjoys the natural rights of liberty and private property. No hierarchical system of economic domination exists, because everyone is equal to everyone else. Nor is government necessary, because everyone lives according to an innate law of nature that is readily discernable through reason. In Locke's words, "The state of nature has a law of nature to govern it, which obliges everyone: and reason, which is that law, teaches all mankind, who will but consult it, that being all equal and independent, no one ought to harm another in his life, health, liberty, or possessions."¹

The primary image that Locke uses to justify private property ownership is that of mixing the hand with the land. He starts his argument with an emphasis on the body and extends it to include the fruits of one's labor. He writes, "Every man has a property in his own person: This nobody has a right to but himself. The labor of his body, and the work of his hands, we may say, are properly his." In other words, when one produces something, "He has mixed his labor with, and joined to it something of his own, and thereby makes it his property."² Thus, in the original state of nature, that is, of perfect Freedom, everyone has a natural right to property both in the form of the products of his or her labor as well as the land on which they are produced.

Locke's ideas about the state of nature, natural rights, and Freedom laid the foundation for Modern society's support for private property ownership. Locke also recognized that human nature has a negative as well as a

positive side. As history has repeatedly demonstrated, everyone runs a constant risk of being subjugated or enslaved by abusive monarchs. As a consequence, individuals who want to keep their Freedom and protect the rights that they enjoy in the state of nature must create a government that will protect them against the tyrants who would take them away. Locke's view of government will be examined in depth in the next chapter.

Supplementing Locke's call for Freedom and the right of private property, Adam Smith set forth the case for the modern marketplace system. As will be discussed later in this chapter, the only serious contender to Smith's ideas is Karl Marx, who left a heavy footprint on most of the 20th century but whose influence has receded steadily since the end of the Cold War and the dissolution of the Soviet Union. Since Smith preceded Marx, his views will be described first.

More than anyone else, it was Adam Smith who helped calm the fears of anxious generations caught up in the dynamic changes that created modernity. Smith set forth his economic ideas in the best-known of his writings, *An Inquiry into the Nature and Causes of the Wealth of Nations*.³ Written in 1776, this book laid down the major principles of modern economics. At the core, his view of the modern marketplace is easy to grasp, even though the practical operations of the modern economy are very complex.

The cornerstone principle of Smith's position is marketplace competition unimpeded by government intervention. Through the *Wealth of Nations*, he demonstrated how and why the newly emerging urban-industrial society brought more benefits to the emerging Modern society than those associated with Premodern agrarianism. Building on his central premise, Smith wove together several ideas that reinforced his core concept of competition. These include the law of supply and demand; self-interest and the role of the consumer; the quality and price of goods; employment; wages; and so on. In a nutshell, Smith gave the emerging Modern world a new model of economic conduct. Left to itself, marketplace competition fosters unobstructed exchanges between buyers, who create demand for goods and services, and sellers, who provide them.

The benefits that flow from supply and demand are enormous, provided that a robust system of competition exists among suppliers who compete against each other in an open and unobstructed marketplace. In this way, it is the consumer who is the king (or queen) of the new system, not the monarchs. By designating the purchasers of goods as the true royalty of the marketplace, Smith shifted the nobility image away from the feudal elites who dominated the Premodern agrarian system of land ownership. In a marketplace system based on open competition, it is consumers who decide how and when to spend their money. As a result, they hold sway over the marketplace, because sellers must persuade buyers to purchase their goods and not those of competitors.

The key to the entire system rests on maintaining marketplace competition, which guarantees consumers can buy the best products at the lowest

prices. Stated simply, smart consumers shop around for the best value. In Smith's perception, consumers are the direct beneficiaries of an open, free, and competitive marketplace for the simple reason that, in order to survive, sellers must make their goods more attractive to consumers than their competitors' goods.

The marketplace system has other benefits as well. As consumer demand increases, suppliers respond by producing more goods. The price that consumers pay is regulated by the internal demands of the marketplace and not by outside government interference. Smith called this *laissez-faire*. The price of any item will find its level automatically through competition among sellers and buyers who determine what they are willing to pay. For Smith, this means that the marketplace is self-regulating through the give and take of supply and demand. Reducing supply leads to higher prices. Increasing supply results in lower prices. Competition (not government) is the great regulator of both quality and price, or as some have called it, "the hidden hand of God."

As Smith observed, in the transition from Premodernism to Modernism, it was the bottom-up, unobstructed marketplace that was replacing top-down, agrarian feudalism. His claim to fame rests on being the first to systematically describe the forces that were at play in this new structure. As demand increases among consumers, factories respond by producing, distributing, and selling more goods. This in turn opens up employment opportunities for peasants who migrate from rural to urban areas in search of work. In order for factory owners to produce more goods that will satisfy growing consumer demand, they must hire more workers, who in turn receive wages in exchange for their labor.

Then, with greater financial resources in hand, laborers enter the marketplace as consumers who increase the demand for more goods, which leads to increasing production to supply them, which leads to hiring more workers who collectively receive more wages, which they can use to increase the demand for more goods, and so on. This cycle of supply and demand is both self-sustaining and expansive. As demand increases, so do production, employment, and wages, all of which leads to more demand, and so on. In theory, this cycle can repeat itself endlessly as expanding demand generates more supply, employment, and wages.

Thus, as Smith defined it, the dynamic modern marketplace system for producing wealth was a vast improvement over the static Premodern land-based structure where the production of wealth had become static. In the marketplace system, the repetitive cycle of growing demand, growing supply, growing employment opportunities, and growing wages results in open-ended economic expansion. For Smith, the ultimate outcome of the system is that nations enlarge their wealth, and as total wealth grows, everyone benefits. Stated metaphorically, as the marketplace expands, everyone increases the size of their bulging pockets. It was this new image of an economic system that provides universal benefits for everyone that

enabled Smith and his followers to win the day over those who nostalgically defended a fading feudalism.

In addition to describing the economic advantages of the marketplace, Smith also held that the marketplace could lay claim to superior ethical benefits consistent with the utilitarian morality that was described in the previous chapter. As paradoxical as it seems, the expression of self-interest leads to altruism and greater happiness. As consumers express their self-interests through demand for more goods, producers seek to satisfy their own self-interests by supplying consumers. Since competition regulates quality and price, the consumer has the choice of what to buy and where to get it. As more people benefit, happiness increases. The self-interests of consumers are fulfilled when they have access to the highest quality goods at the best price, as are those of suppliers who earn profits from their sales, which in turn can be reinvested to create more goods that satisfy increasing demands.

Finally, none of these benefits, economic or moral, would emerge without the existence of Freedom. When the marketplace operates apart from government control, consumers can buy what they want, and producers can decide what they want to supply. Laborers can work where they want rather than where some monarch forces them to work as vassals within the hierarchical feudal system. In sum, the marketplace system is both economically and morally superior because it operates freely without compulsion, creates more jobs and choice, and ultimately increases happiness for a growing number of people.

In 1776, the year *Wealth of Nations* was published, Smith's case for marketplace capitalism found a receptive ear among those who rode the economic forces of change that helped transform Premodern into Modern society. By 1848, Karl Marx, who wrote *The Communist Manifesto* with Frederick Engels, would have none of it.⁴ It had been 72 years since Smith released *Wealth of Nations*. Marx was an eyewitness to the actual operations of the emerging system of capitalism during its formative stage in Europe, and he was not convinced that it functioned according to Smith's theoretical speculations.

The heart of Smith's position is that competition is self-regulating if government or any other outside force refrains from interfering with the law of supply and demand that determines price and quality. Contrary to Smith, Marx argued that competition drives out competition. In turn, this leads to a condition of monopoly, which eradicates the self-balancing forces of competition that allegedly regulate price and quality. Under monopoly, the consumer's advantage of buying high-quality goods at the lowest possible price disappears.

Instead, the consumer has no alternative but to purchase goods from one supplier, because all other suppliers have been driven from the marketplace. As a result, the free, open, and competitive marketplace that Smith envisioned disappears entirely, to be replaced by a single supplier that con-

trols completely the conditions of economic exchange. In the quest to maximize profits, the monopoly supplier reverses the high-quality-low-price formula by offering lower quality goods at higher prices. If consumers object to the monopoly supplier's business practices, they have no choice but to take it or leave it.

From this point forward, Marx developed his own views on capitalism's inevitable evolution as an economic system, contending that it will destroy itself through its own internal contradictions. He was convinced that it was only a matter of time before capitalism would be replaced by communism. In his publication, *Capital*, Marx explains in great detail how this process will unfold.⁵ Like Kant, Marx's ponderous writing style challenges any reader to translate his ideas into easily understandable language. At the same time, like Kant, his essential ideas are easy to grasp.

Marx's scathing critique of capitalism starts with a meticulous analysis of marketplace competition. As consumers create demand in the marketplace, many suppliers respond by producing products that will satisfy it. At this stage of the process, Marx agrees with Smith. Because many suppliers enter the marketplace, consumer kings and queens can shop around to buy the best goods at the cheapest price. During capitalism's initial stage of development, competition does serve the interests of those who create the demands of the marketplace.

However, according to Marx, all this changes as capitalism evolves. In particular, two dynamic forces interact to drive the system inevitably in the direction of monopoly. The first is overproduction, and the second is bankruptcies and buyouts. When many merchants compete by producing goods designed to satisfy growing consumer demand for a given good or service, they inevitably over-supply the marketplace. In addition, some producers supply the marketplace with products that are superior in quality and lower in price compared to those of their competitors.

During the give and take of marketplace competition, some suppliers rise above the others. When this occurs, they become the winners of the system, while those they out-compete become the losers. According to Marx, this winners-and-losers scenario is capitalism's unavoidable outcome. This means, contrary to Smith, that the marketplace does not benefit everyone. In fact, many do not benefit at all. Capitalism is not altruistic. To the contrary, it is cruel.

Furthermore, over time, capitalism is destined to create more losers than winners because competition is not self-regulating. Instead, competition inevitably drives out competition because losers have no choice but to get out of the marketplace by declaring bankruptcy or turning to winning competitors to buy them out. When this happens, the system has taken its first step in the direction of monopoly. Winners consolidate their advantages and become larger and more formidable forces in the marketplace, which moves in the direction of having fewer suppliers to meet consumer demands.

In addition, the marketplace system is vulnerable to the boom-and-bust business cycle that throws more and more people, especially the working class and bankrupt suppliers, into poverty. When a marketplace becomes over-supplied with goods, producers react by cutting back on production. When this occurs, they lay off workers, who then lack the financial resources to buy goods. As a result, unemployment grows and the economy stagnates. At this point, the fewer number of sellers who remain in the marketplace consolidate their positions of greater strength relative to other sellers. In addition, more workers tumble into poverty. In other words, as the group of suppliers shrinks in number and becomes richer, the size of the impoverished working class increases.

The economy regains its forward momentum as the over-supply of goods eventually diminishes and the balance between supply and demand is restored. At this point, the bust of the economic cycle is over, and the boom once again gains momentum. Managers recall laid-off workers or hire new ones, who then acquire enough resources to increase the demand for more goods. However, as before, it is only a matter of time before suppliers repeat the pattern of over-supplying the marketplace, which then triggers another round of lay-offs and recession. When this occurs, more enterprises go bankrupt or get bought out by an increasingly smaller number of successful sellers, which in turn drives more people into poverty.

According to Marx, this pattern of predictable boom-and-bust cycles causes each subsequent recession to worsen. By this he means that each period of economic stagnation is longer than the one that preceded it, and the rebound back to economic prosperity becomes more difficult. As wealth becomes concentrated into the hands of a numerically shrinking class of owners, which Marx labeled the bourgeoisie, the poverty class of workers, called the proletariat, grows. Since the entire system depends on the ability of consumers to create demand, and since there are more impoverished workers who do not have the resources to create it, the recovery to economic expansion takes longer and the conditions of poverty worsen.

When Marx argued that capitalism would eventually collapse under the stress of its own internal contradictions, he meant that the progressively worsening business cycle, that is, the repeated pattern of boom and bust, would reach an inevitable breaking point. Succeeding recessions would lead ultimately to such an extreme state of economic depression that capitalism could not recover. When this occurred, Marx proclaimed that the system would be ripe for revolution. The progressively growing army of the proletariat, that is, the impoverished working class, would then be poised to rebel against the capitalist class.

Under communist leadership, the working class would overthrow the profit-centered system of private property ownership that Locke and Smith had touted so highly, but which in actuality, according to Marx, benefited only the few at the expense of the many. By eliminating this system and by

collectivizing the ownership of all profit-driven property, the poverty-stricken working class would share in the multiple benefits and products that their combined labor produced in the first place.

As a result, they would be freed from enslavement to the capitalist greed that Smith had labeled as altruistic self-interest, but which in reality was merely the ruling class's ideology that pulled them into a relentlessly downward spiral of squalor and destitution. By overthrowing the capitalist class, Marx proclaimed that the working class had nothing to lose but its chains. Thus, for Marx, the long march toward Freedom could not be accomplished through the private possession of property, that is, capitalism, but rather through, as he called it, the collective ownership of the means of production, that is, communism.

The last of Marx's criticisms of capitalist society involves his view of the roles of religion and government. He was nothing less than scathing in his critique, which he combined with a unique knack for sloganeering. He called religion the opiate of the masses, by which he meant that it sedates workers from making revolution against the capitalists by promising them a better afterlife if they remain subservient in this life.

He labeled government in a capitalist society the executive committee of the bourgeoisie or ruling class. In Marx's view, Smith's laissez-faire doctrine gave the ruling class the perfect ideology it needed to run rampant over the working class. Whereas Smith made the case for the marketplace by advocating that government *should* stay out of it, Marx argued that government *would* stay out because the ruling class uses it merely as a tool to oppress the masses.

It was on the issue of the role of government that both Smith and Marx missed the mark—and by a wide margin. In the final analysis, it turned out to be capitalism's salvation and communism's fatal flaw. When Vladimir Lenin and his successful Bolshevik revolutionaries established the Soviet Union in 1917, they collectivized all the means of production under state ownership and used their power to abolish any semblance of marketplace activity.⁶ For several decades, Soviet leaders established top-down economic plans that encompassed every phase of economic activity from determining the output of goods and services to setting prices. Lenin, Joseph Stalin, and those who came after them were convinced that a central-command form of economic organization under the control of the Soviet government would out-produce and more fairly distribute the prodigious economic output of modern industrialization.

History proved them wrong. The reason turns on three crucial issues: (1) how government intervention into the marketplace became the means by which capitalism survived, (2) how democracy in a capitalist society evolved to give workers access to political power in order to advance their self-interests, and (3) how Soviet Russia's central command system failed to keep pace with Modern society's growing demand for more goods and

services. In other words, Marx and his followers were simply wrong in their assessment about the role of government in both capitalist and communist societies.

At the same time, Marx was correct in his prediction that successive business cycles would get progressively worse and ultimately spin downward into economic depression. The U.S. stock market crash that occurred in late October 1929 precipitated a decade-long worldwide economic crisis that swept through Europe and enveloped the world. More than any other event, the depression of the 1930s jeopardized capitalism's long-term viability and sowed the seeds of mid-century fascism and World War II. It was in the midst of this crisis that Marxists anticipated the complete collapse of capitalism along with the rise of worldwide communism.

However, much to their disappointment, capitalism did not die. Instead, it became so rejuvenated and robust that by the end of the 20th century, its capacity to fulfill the economic needs of Modern society vastly out-produced the failing Soviet Union's centralized system of command and control. Capitalism's remarkable rebound from the severe economic depression that threatened its existence did not happen by chance, but by implementing the innovative ideas of John Maynard Keynes (1883–1946). It was Keynes, a British economist, who, in the midst of the depression, showed how capitalism would benefit from government intervention into the marketplace, contrary to what Adam Smith had contended.⁷

It is helpful to think of Keynes's approach to government's role in the modern marketplace economy as falling somewhere between the extremes of Smith's view that government should not interfere at all and the Marxist-Leninist belief that government should take complete control. It was in the depths of the 1930s worldwide depression that Keynes steered a middle course between Smith and Marx by offering an alternative vision of government's role in a capitalist society. He advocated neither a total hands-off nor a total hands-on policy. Instead, he envisioned that government could intervene into the economy in ways that would preserve the benefits of the marketplace while stabilizing the business cycle and stimulating growth without fueling inflation.

In essence, he advocated a policy of government intervention through regulation. His ideas opened the door for capitalism's robust recovery and ability to out-compete communism in meeting the economic requirements of Modern society during the latter half of the 20th century. As a result, during this time period, a growing number of nations began to embrace some form of regulated capitalism. By the end of the 20th century, this came to include even the world's largest remaining communist country, China, whose highly centralized one-party government has progressively embraced the marketplace system as the most effective way to meet its growing economic demands.

From the perspective of the 21st century, it is clear why a government-regulated, but not controlled, economy proved to be superior to Smith's

image of nonintervention as well as the central-command economy of the Soviet Union and its bloc nations. It is simply not possible for the state to meet all the growing demands of a modern economy by determining what products will be produced, in what quantities, and at what price, or to set the wages of those who produce them. It is also clear that a government-regulated economy, not a purely laissez-faire marketplace of the type Smith advocated, is far more effective and efficient than other arrangements.

As Keynes maintained, government can use several strategies to stimulate economic productivity while at the same time fostering business-cycle stability and controlling inflation. As has been pointed out time and again and most dramatically by Marx, the Achilles' heel of capitalism is, on the one hand, oversupply, which triggers unemployment and recession. On the other hand, excess demand and scarcity of supply drives an economy in the direction of inflation. It is Keynes who showed the way to curb capitalism's dual dangers. He identified ways in which government can intervene to prevent an excess of both supply and demand, stimulate maximum employment, and steer an economy between the rock of recession and the hard place of inflation.

Like Adam Smith, Keynes recognized that the spending habits of consumers play a crucial role in the connection between supply and demand. If they withhold spending through excessive savings, they reduce the demand for goods, which in turn leads to oversupply, unemployment, and recession. Government can influence household and business spending patterns by managing money supply. To stimulate spending, government can increase the amount of money it puts into an economy and lower the lending rate.

On the other side of the supply-and-demand equation, according to Keynes, if excess demand creates inflation, government can increase the lending rate, which dampens borrowing and spending. In addition, by reducing taxes, government can place more money in the hands of consumers to purchase more goods, which leads businesses to increase their supply, employment, and wages, facilitating more demand. Beyond private-sector employment, government can hire laborers and other personnel to work on numerous government-sponsored projects and activities. This also leads to increasing demand, because through their wages and salaries, government employees have the financial resources to desire and acquire more goods.

During the worldwide depression of the 1930s, U.S. President Franklin D. Roosevelt was one of the first international leaders to introduce Keynesian principles in an effort to reverse the worst economic slump in American history. This, along with the economic growth that was related to military expansion during World War II, brought the United States and other world economies back from the brink of collapse.

Despite periodically mild to moderately severe recessions that have recycled in capitalist countries since the 1930s, most governmental leaders have adopted many Keynesian standards to stabilize their economies.

Nowhere was this more clearly demonstrated than in the United States, when in late 2008 President Bush approved a \$700-billion initiative to combat the mortgage and credit crises, and President Obama followed up in February 2009 with a \$787-billion stimulus package designed to reverse an economic downturn that threatened to send the slumping American economy into a 1930s-type depression. Other countries around the world also turned to similar Keynesian strategies to stimulate the recovery of their struggling capitalist economies.

In addition, as history shows, Marx's heroes, the proletariat, have demonstrated an astute ability to advance their economic self-interests through their nations' political systems, especially if they permitted the democratic redress of grievances. Contrary to Marx's extreme view that government in a capitalist society would defend the interests of the ruling capitalist class to the bitter end, the exact opposite occurred in the midst of the Modern world's most severe global depression. The 1930s mark the moment in time when industrial laborers achieved some of their most substantial successes by electing government officials who proved responsive to their dire economic circumstances.

Because of Marx's passionate anti-capitalist outlook, he could not envision that the mass of workers would wish for anything short of capitalism's total eradication. He was wrong. As it turned out, the vast majority of laborers and their leaders in capitalist countries did not desire the demise of their economic system, but wanted simply to share the spoils of its enormous success. By electing political officials who advanced a pro-labor agenda in the halls of government, the working masses in capitalist countries began to reap the benefits of their collective efforts.

Of greatest importance in the United States was the 1936 National Labor Relations Act, which gave factory workers the legal right to organize, strike, and bargain collectively with management over wages, health insurance, retirement options, and other benefits. Slowly but steadily, before and after the Second World War, democratically elected governments in capitalist societies around the world put in place the structures that enhanced the security and well-being of their industrial employees, whose combined labor helped produce the products that satisfied the growing economic demands of Modern society.

By the end of the 20th century, the compromises and balances that emerged out of the political give-and-take between management, labor, and government resulted in achieving a level of economic productivity never before experienced in the world. It was this, more than any other factor, which led capitalism to succeed over the increasingly stagnating system of Soviet top-down command and control. In the realm of economics, the emergence of the regulated marketplace proved to be a triumph for Freedom.

However, despite its success in out-competing other economic structures, the modern marketplace system is not without its imperfections. Three, in particular, stand out above the rest. The first involves the inability of

capitalism to eradicate lower-class poverty that entraps many individuals and prohibits them from participating in the economy in a beneficial way. Several reasons have been advanced for this lack of comprehensive participation, such as deficient education or job preparation, discrimination, physical challenges, mental illness, alcoholism, drug addiction, lack of motivation, and so on. This persistent condition has been called the dilemma of the bottom 10 or 20 percent. Many resources and much energy have been spent in efforts to overcome it.

This does not imply that other types of economic systems have thus far proven themselves to be more successful in the long term at coping with this problem. Given the dramatic events of the past several decades, it appears that a regulated modern marketplace economy is able to lift more people out of poverty than any other system. No doubt, this is one of the main reasons why the Soviet Union collapsed and communist China has shifted its economy away from excessive state control and toward free-market capitalism. Despite its imperfections, in the area of producing and distributing goods and services in Modern society, some form of regulated capitalism does it better than other alternatives.

At the same time, for advocates of capitalism, the remaining hurdle involves finding ways to get everyone involved productively somewhere in the system. No doubt, a certain percentage of unemployment will always exist as a result of layoffs and time spent by individuals making job transitions or looking for work. However, many of these are temporary conditions that cease when workers become employed. Capitalism's greatest challenge applies to those who are at the bottom because they remain persistently unemployed, underemployed, or employed in such low-paying jobs that they become stuck in poverty.

In responding to this chronic dilemma in the past several decades, most capitalist countries have created a web of public safety-net programs that offer cradle-to-grave support for persons who are unable to provide for themselves through employment or financial self-sufficiency. While capitalist societies differ among themselves in the number of programs and the amount of support they offer (for example, European nations provide more public benefits than the United States does), all modern capitalist societies have evolved and continue to evolve in the direction of fine tuning the balance between sustaining the spirit of entrepreneurship and the need to develop programs for those who struggle to survive on the system's edges.

The second major dilemma confronting modern forms of regulated capitalism involves the growing wealth gap between the top and bottom rungs of the economic ladder. It is one of the strengths of the marketplace that more and more people have access to an increasing number of goods at cheaper prices. International trade contributes to this process because of the lower labor costs that exist in countries where firms often relocate. While this practice is surrounded by much controversy regarding accusations of worker exploitation in developing industrial nations desperate

to improve their economies, environmental degradation, and job losses in advanced industrial countries, the modern global economy floods the international marketplace with an ever-increasing abundance of cheaper goods.

As a result, any society stimulates the growth of its middle class when it makes available to an increasing number of people more goods at reduced prices. The larger this class becomes, the greater are the chances of ensuring social stability. Or stated differently, as more and more people perceive that their economic system is working for them, the higher are the odds that they will support it. It is precisely at this point that capitalism reveals one of its primary paradoxes. Even as the middle class grows in a capitalist society, the wealth gap widens between the richest and poorest members. Why does this happen?

The answer to this question lies in understanding one of the most fundamental features of the modern marketplace system. Even though Marx did not anticipate the emergence of a broad middle class that would greatly reduce the threat to capitalism's survival, he did foresee that the distance between the top and bottom rungs of the economic ladder would become greater over time. This happens because those who manufacture and distribute cheaper goods to an increasing number of people reap enormous benefits that lead to widening the wealth gap between themselves and the bottom 10 or 20 percent, who do not yet fully share their country's expanding economic benefits. As more and cheaper goods have become available to an expanding middle class, the gap between the top echelons of wealth and those at the bottom has grown.

This phenomenon can be demonstrated readily through the Gini index, which is one of the most widely used statistical tools for measuring changes that occur in the distribution of wealth over time. Numerous authors have pointed out that in the United States, the gap between the rich and poor has progressively widened during the last two decades. As a result of this continuing trend, by the start of the 21st century, the top 20 percent of the U.S. population controlled about half of all income, over 90 percent of total financial wealth, and nearly 85 percent of total net worth. At the other end, the bottom 40 percent possessed around 12 percent of all U.S. income and 0.2 percent of total net worth.⁸ In addition, the official poverty rate as defined by the U.S. government has for decades remained at a constant 12–15 percent.

Thus, as the modern government-regulated capitalist economy has developed over the past several decades, its major structural features have become locked in place, so to speak. As more people around the world join the middle class, (1) they become increasingly content and supportive of their economic systems, (2) producers and suppliers become richer, (3) the wealth gap between the highest and lowest levels widens, and (4) a permanent poverty class of one-tenth to one-fifth of the population hovers at the bottom. This means that Marx was wrong in concluding that the

economic status for the vast majority of workers would deteriorate over time. The polarization and collapse of capitalism that he predicted did not come to pass, because the expanding middle class provides a vital center of stability as governments continue regulating their economies while simultaneously searching for solutions to the causes of poverty.

The reason the modern marketplace economy has bested all competitors and recovered from near disaster during the 1930s is because governments in capitalist countries have learned to (1) preserve a robust and regulated marketplace that supports entrepreneurship and makes more goods available at reduced prices, (2) create public policies and programs that protect laborers, (3) provide an array of safety-net programs for those who do not participate temporarily or permanently in marketplace activities, and (4) provide for personal improvements such as education, accountability, training, and so on.

The main differences that exist among capitalist countries around the world lie in the relative weight they give to these four domains. Thus, contrary to Smith, Keynes demonstrated that government intervention is necessary to sustain the market system. Contrary to Marx, he held that democratic government can serve the interests of the working class and create public policies and programs that provide for the needs of the poor, without at the same time collectivizing all of the means of production under state ownership and control.

Despite these successes, however, there is one area that could pose a threat to the long-term survival of the modern, regulated capitalist economy. Even though Keynes's understanding of the positive role that government can play and has played in a capitalist society superseded the views of both Smith and Marx, there is one condition where Smith's and Marx's ideas converge. It involves the economic phenomenon known as oligopoly, which stands somewhere between the multi-seller laissez-faire marketplace and the one-seller monopoly system.

Oligopoly involves an economic condition where a limited number of large companies dominate an industry to such an extent that they can exert a powerful influence on prices. Even though oligopoly falls short of monopoly, critics of oligopoly arrangements allege that the few firms that dominate an industry are able to protect their collective interests by collaborating through either direct collusion or tacit understandings to fix prices. From Smith's perspective, such collusion undermines competition without which the benefits of a market economy cease to exist. From Marx's perspective, the economic power of oligopolies to set prices demonstrates government's inability to sustain the market system. In Marxist terms, oligopolies function like monopolies.

According to the U.S. Bureau of the Census, there exist numerous cases of highly concentrated markets where only four firms or fewer dominate 80 percent or more of business transactions. These include industries such as breakfast cereals, breweries, greeting cards, glass containers, washers

and dryers, and many more.⁹ In addition, in many situations, one or more of these four companies will gain monopoly-like control in an already heavily concentrated oligopoly market. Examples include the baby food industry, of which Gerber claims 70 percent of market share, and the computer software field, which Microsoft dominates so thoroughly as to make competition virtually nonexistent.

As oligopolies have arisen in an increasing number of industries, widespread disagreements have emerged over whether or not they suppress the continuation of competition. For critics, competition is either nonexistent or at best minimal because oligopoly firms have figured out how to overcome competition through direct and indirect price setting. As is often pointed out, from the customer's point of view, the price of gasoline that is purchased at the pump hardly varies from station to station by more than a few pennies per gallon. Price competition is minimal. However, from the companies' perspective, competition is always a part of the transaction, because customers can change their minds and buy gasoline wherever they want. No guarantee exists that any company's market share at any given point in time will continue into the future.

How have governments responded to the drift toward oligopoly? In order to offset the negative effect that monopolies or highly concentrated oligopolies have had on the modern capitalist economy, governments have passed laws designed to assure the continuation of competition. Whether or not this is merely window dressing is hotly debated. Nonetheless, like labor legislation and safety-net programs, here is another example of government intervention. In the early 1900s, Standard Oil consolidated its control over oil refining so extensively that it successfully eliminated any semblance of competition. In a landmark U.S. Supreme Court case in 1911, Standard Oil was divided into 34 separate companies in order to restore competition within the petroleum industry. Using the Sherman Antitrust Act of 1890, throughout the 20th century the U.S. government successfully prosecuted numerous companies for monopolistic practices, including Alcoa Aluminum, Western Electric, Microsoft, and many others.

No doubt, as the debate continues over whether highly concentrated oligopolies operate in an open environment or act like monopolies that eliminate competition, democratic governments will continue intervening into the marketplace wherever necessary to guarantee the continuation of competition. This means that as the modern capitalist economy evolves, government must walk a fine line in order to prevent Marx's worst-case scenario of capitalism's inevitable slide toward monopoly and Smith's best-case scenario that competition produces broad social and economic benefits that result in increasing the wealth of nations.

In sum, if governments continue to intervene successfully by preserving and promoting the enormous possibilities that the marketplace offers, serving the needs of all who labor, providing for the general welfare, sup-

porting the needy, and helping to balance the numerous self-interest groups that make up Modern society, then some form of regulated capitalism will continue to demonstrate its superiority over competing economic options that remain in play throughout the emerging global village.

CONCLUSION

Several conclusions can be drawn from the above discussion of the modern marketplace. First, it is clear that with the gradual demise of Premodern society, a new form of modern economic organization emerged. Modern science and technology played a crucial role in the ongoing transformation from land-based structures to the factory systems that keep pushing into many of the world's remaining rural areas. More than two centuries ago, Adam Smith began to speculate about the nature of the new form of economy that was sending angst into the hearts of those who struggled to preserve their ancient but dying feudal securities and privileges.

Over time, the accuracy of Smith's observations of the advantages of the modern marketplace have been amply demonstrated in the form of growing economies that produce multiple benefits up and down the economic ladder and throughout society as a whole. At the same time, his ideas about competition as self-sustaining and the laissez-faire role of government have undergone both criticism and modification. As the drift toward monopoly played out through repeated and worsening boom-and-bust business cycles, which Marx foresaw, it became increasingly clear, as Keynes foresaw, that the modern marketplace could be saved only if government intervened. This stood in contrast to Smith, who said that it should not, and Marx, who asserted that it would not.

Once the principle of intervention and regulation was established in the 1930s, the role of government in capitalist societies increased steadily. To date, this has involved the formation of public policies and programs that manage the flow and status of money. These policies also protect workers, the environment, and the downtrodden, among others. Governments also intervene through anti-monopoly laws to maintain the advantages of competition—even in highly concentrated oligopoly industries like oil or computer software production.

In sum, as the above discussion demonstrates, at the start of the 21st century, the type of economic structure that generates the greatest amount of economic benefit by producing and distributing high-quality goods at the lowest price is the modern government-regulated marketplace system. It continues to encourage individuals to express their entrepreneurial spirit, and has at the same time created policies and programs that provide for the well-being of society as a whole. The next chapter examines how government has evolved during the transition to modernity and the role that Freedom has played in the process.

NOTES

1. John Locke, *Two Treatises of Government*, ed. Peter Laslett, rev. ed. (New York: Cambridge University Press, 1963), p. 311.
2. Both quotations are from Locke, *Two Treatises of Government*, p. 328.
3. Adam Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations* (1776; repr. New York: The Modern Library, 2000).
4. Karl Marx and Frederick Engels, *The Communist Manifesto* (New York: International Publishers, 1948).
5. Karl Marx, *Capital* (Chicago: Charles H. Kerr & Company, 1909).
6. Vladimir Lenin, *The State and Revolution* (Moscow: Progress Publishers, 1918).
7. John Maynard Keynes, *The General Theory of Employment, Interest, and Money* (London: Macmillan & Co., 1936).
8. Manuel G. Velasquez, *Business Ethics: Concepts and Cases*, 6th ed. (Upper Saddle River, N.J.: Pearson Education, 2006), pp. 133–135, table 3.1, figures 3.1–3.3.
9. U.S. Bureau of the Census, *Concentration Ratios in Manufacturing*, Census of Manufacturing, February 1997, table 4.

CHAPTER 9

Fifty Plus One

This chapter compares the forms of government that prevailed during the Premodern period with those that exist in the Modern world. There is little doubt that the political structures of the Premodern period differ substantially from those of Modernism even though Premodern forms of government still survive in the Modern world. As will become clear, one of the major macro trends of the past three centuries has been the consistent, although uneven, spread of democracy throughout Modern society. At its core, the evolution of governing by majority rule, that is, fifty percent plus one more vote, is grounded in the modern quest of Freedom.

First, Premodern approaches to governance will be described below. This will be followed by a discussion of how modern democracy arose out of the dynamic changes that sprang from the Renaissance and Enlightenment—along with the writers who contributed the most to defining its broad principles. Then, after discussing how democracy has spread around the world, the chapter will end by assessing what might lie ahead for democratic governance as the global village grows throughout the 21st century and beyond.

The place to start is with definitions. Every society's survival depends on its ability to achieve and maintain political stability. If it does not accomplish this successfully, it is only a matter of time before it will collapse into chaos. In order to secure its political future for both the short and the long haul of history, it must address two closely connected concepts: power and authority.

Power refers to the ability of an individual or group to impose its will on others even when opposition exists to that imposition. Authority involves

accepting the legitimate right of an individual or group to impose power on others. This means that social stability depends not only on the effective exercise of power for the purpose of maintaining social order, but also on the perception by those who are governed that those who govern have the legitimacy to do so. Thus, in combination, power and authority involve the central issues of (1) who can make what decisions, (2) how and when they make them, and (3) on whose behalf they make them.

As every student of history knows, when it comes to issues of political stability, two of the most important concerns are how power is transferred from one ruling group to another and what social conditions optimize the potential for political stability. In the first case, the peaceful transfer of power from one to another group remains a constant challenge in all societies. Although there is no permanent guarantee, the odds of this occurring increase wherever democratic forms of government exist, that is to say, when those who obtain power are perceived do so legitimately.

In the second case, the chance that social stability will deteriorate increases when two types of political conditions exist. The first involves tyranny, where power is exercised without authority. The second entails a political vacuum in which neither power nor authority prevails. Rule by tyranny always involves suppression of the right of citizens to oppose their government and use of the police or military to maintain power. Tyrannical forms of government are inherently volatile and potentially explosive, because social stability depends on the government's capacity to crush opposition from the top on down. As history demonstrates repeatedly, the cycle of tyranny, oppression, alienation, rebellion, and bloody conflict between those who rule and those who are ruled is an old story.

An equally old historical story involves the dissolution of social order into chaos in situations where there does not exist either (1) a government that can create and sustain social stability or (2) a legal structure that supports orderly and nonviolent political change. The proverbial saying that power hates a vacuum rightly applies to situations in which no individual or group is in control but where many individuals or groups compete or even wage war against each other to get it. As history demonstrates, establishing and maintaining political order that combines the use of power by those who govern with the legitimate support, that is, authority, of those who are governed is no simple matter.

No nation is ever permanently immune from the twin dangers that loom on the horizon of every society's future. The only real protection against either tyranny or chaos is constant vigilance and determination to avoid drifting in either direction. When it comes to governance, all societies confront the constant challenge of creating and sustaining a political system that offers the best prospects for (1) transferring power in an orderly and peaceful manner, (2) promoting citizen participation and support, and (3) assuring long-term stability. As will be demonstrated throughout the rest of this

chapter, in the emerging global village some political systems are more successful than others in responding to these challenges.

PREMODERN

Like the other areas thus far discussed in this book, questions related to the type of political system that leads to the greatest amount of social harmony on issues of power and authority begins with the ancient Greek philosophers. Plato, who followed in the footsteps of his beloved mentor, Socrates, speculated about how to best govern the Greek city-state, called the *polis*. In his widely read book, *The Republic*,¹ Plato laid down principles that he believed would achieve the highest levels of excellence and long-term stability based on his commitment to standards of justice.

Plato believed that philosophers are the citizens most capable of grasping the nature of the Good because they possess a superior intellect that nature gave them at birth. As a result of this natural endowment, they should govern the polis as philosopher kings. For Plato, orderliness in the city-state should parallel the soul's internal harmony, and all citizens should occupy one of four statuses in society according to the abilities with which nature endowed them. Plato reasoned that just as only philosophers should rule, soldiers ought to defend, and farmers and artisans should provide food, clothing, shelter, and other basic provisions necessary to sustain life.

Plato could not imagine a more perfect polis than one presided over by an aristocracy of philosophers, and he measured the defects of all other forms of governance according to the extent to which they deviate from this ideal Form. His hierarchical sliding scale from best to worst starts with aristocracy and ends with tyranny. In descending order, he held that aristocracy could give way to timocracy, or government by people of ambition or honor. Then timocracy could fall into oligarchy, or rule by the rich. In turn oligarchy might spin downward into democracy, or control by the poor, if the masses could successfully overthrow the oligarchs. It was Plato's belief that democracy, rather than creating steadiness, is inherently unstable because it could easily slide into the worst form of all, tyranny, or rule by one arbitrary dictator who could care less about goodness or Truth.

In his quest to find the perfect political Form for the polis, Plato attracted both support and opposition. Advocates stressed the value of governance by people of wisdom, knowledge, and goodness. Opponents claimed Plato's approach was little more than an elitist caste system that would lead inevitably to suppression from the top on down. Plato's favorite student, Aristotle, shared some of his mentor's ideas but also found many reasons to differ with him.

Like Plato, Aristotle agreed that tyranny is the worst form of government. However, he disagreed with Plato's view that a ruling class of philosopher kings that held all property in common should govern. Aristotle's

approach to the best way to govern the city-state grew out of his belief that humans are social animals by nature and the good life can be achieved only in the polis. This means that political governance is a means to the end of assuring the attainment of the good life in community.

As stated in chapter 3, Aristotle held that every object or living being in the universe exists for a purpose, or *telos*, as in the case of the humble acorn whose purpose is to become a mighty oak tree. Humanity's purpose is to achieve happiness by living according to virtue based on reason in the pursuit of excellence. Attaining happiness is not merely one option among many. It is the essence of humanity's purpose for being. The only way for individuals to be truly happy is to be virtuous. Everything else is a means to this end.

To be virtuous means to use reason to discover and live by the golden mean, which Aristotle defines as the midpoint between the extremes of excess and deficiency. One of his favorite examples involves the virtue of bravery. The golden mean for bravery, that is, the middle ground, stands between the excess of foolhardiness and the deficiency of cowardice. In another example, the golden mean of truthfulness has its midpoint between the excess of boastfulness about accomplishments and the deficiency of false modesty that denies their existence.²

Aristotle used the idea of the golden mean to identify the most desirable form of governance. Unlike Plato, who opted for a top-down structure led by philosopher kings, Aristotle pursued a different line of reasoning. The key to human happiness lies in using the golden mean to identify the political system that would produce maximum happiness throughout the polis.³ This led him to identify two different ways to rule. The first centers on pursuing the common good and the second on individual or class interest. His preference is clearly for the first, because attaining human happiness through virtue can be achieved only within a polis that is governed according to shared ideals.

Aristotle further divides his two ways of governing into three possibilities for each: rule by one, by a few, or by the many. He defines as negative the three types that fall under self or class interest. These are rule by tyranny (one lawless person), oligarchy (the few rich and noble), and democracy (the many poor and free). All three good types of political systems fall underneath governing for the common good. These include rule by monarchy (one virtuous leader), aristocracy (a few virtuous leaders), and polity (the many or a mixture of democracy and oligarchy). While he held that monarchy is the best means of governing the polis, he preferred polity over all other forms, even though it includes two types that fall under rule by self or class interest and not the common good.

Aristotle used the doctrine of the golden mean to arrive at this conclusion. While it seems counterintuitive, he reasoned that monarchy—the best system in his mind—is the most abstract and therefore unattainable. Because of this, he concluded that it is better to strive for practical results than

to chase after an unrealistic abstraction. Polity offers more opportunity for stability because it rests on a dominant middle class that is not given to extremes. In addition, it promotes the common good and advocates respect for the rule of law, an essential aspect of Aristotle's view of good governance. It balances the few rich (oligarchy) against the many poor (democracy). In short, polity is the preferred political option for the polis, because, compared to all the other forms, it most closely approximates the golden mean.

With the rise of Christianity after the collapse of both the Greek and Roman civilizations, the writings of Plato and Aristotle faded into the background, where they lay dormant for centuries. Then during the Renaissance and Enlightenment, many writers revisited these ancient writings in search of alternative political approaches to the dominant monarchical structures of medieval Europe. While many authors found inspiration in the writings of Plato and Aristotle, they also expressed criticism of the ancient world's acceptance of slavery and its exclusion of women from the political process, which both Plato and Aristotle took for granted. However, prior to the emergence of modern forms of democratic theory, Christianity in Europe and other religions in different parts of the world developed their own distinct views of how to best govern society.

With the fall of Rome in 410 C.E., the pagans of the ancient world blamed Christianity for failing to support the empire. From the North African city of Hippo, it was the bishop Augustine who rose to Christianity's defense and pointed the finger back at Rome itself. For Augustine, human history consists of a clash between two great heavenly and earthly cities. Within the heavenly city, human behavior is based on the love of God, while in the earthly city it is driven by the love of self. In the earthly city, self-love leads to injustice and brutality, which triggers social chaos, conflict, and ultimately failure. Rome was the quintessential earthly city, and injustice was the cause of its demise.⁴

According to Augustine, the two cities will remain intermingled until history comes to an end with the second coming of Christ, who will then establish the perfect heavenly city on earth. Prior to this endpoint, there are many who appear to be members of the earthly city but who are really in the heavenly city. Others who are in the Church, which is the earth's imperfect heavenly city until Christ comes again, really belong in the earthly city of self-love. Only God knows for certain who resides in the two cities and will separate them when history ends.

It is within this broad framework of the two cities that Augustine set down his political views. Unlike Plato and Aristotle, who believed that it was possible to use reason to determine the best form of government, Augustine held that reason was merely the tool of a corrupted human will. In terms of the polarities discussed in chapter 3, he was a pessimist. This means that he considered perfect earthly peace and justice to be unachievable ideals. Because of original sin, human motivations have become permanently corrupted by self-centered greed, desire for power, fleshly lust,

civil strife, and a host of other evils. When left to their own self-serving devices, human beings use their reason to justify destroying one another through the miseries of war.

Augustine's view of government as an instrument of control extends from this negative view of human nature. The authority to govern is God's gift to a fallen humanity. God appoints monarchs and other rulers to keep order and charges them with the task of securing the benefits of material security, health, honor, protection of families, and so on. It is the obligation of subjects to submit to and obey God's appointed rulers, except when they interfere in matters related to religious faith. The rulers' task is to preserve secular order by securing as much peace and justice as is humanly, although imperfectly, possible. If rulers become corrupt through the abuse of power, it is God's task to replace them and not that of the citizens, who must endure until God intervenes.

Augustine's top-down approach remained Premodern Christian Europe's dominant political form for more than a thousand years down through the Reformation. Despite his emphasis on the centrality of the individual in matters of faith, Martin Luther also shared Augustine's pessimistic view of human nature, and, as a result, advocated strict adherence to monarchical rule as the best way to curb the excesses of human sin. Such centralized approaches to governance were not confined to Europe, but permeated other geographical regions of the world as well.

For example, Muslims developed their own centralized form of governance based on the revelations of Muhammad, as recorded in the Quran and expanded in the Sharia, Islam's voluminous moral and legal code that Muslim jurists developed during the first few centuries after Muhammad's death. The main assumption behind Islam's traditional approach to governing is that Allah has revealed to humanity through Muhammad the perfect and unalterable revelations by which the Muslim community (called the Umma) ought to be organized.

In order to create political order and secure peace and justice, all that is required of traditional Muslim rulers is to spread the Sharia, which ranges from dress codes to the distribution of political authority, into every nook and cranny of society. According to Mahmud Awan, creating a *Pax Islamica* that is founded on the Sharia is Islam's ultimate political goal. It is far more efficient than other forms of social organization, because "the *Pax Islamica* is based on immutable divine laws."⁵ Because many Muslims like Awan assume that the Sharia incorporates the perfect Truths of Allah, it is mandatory that Muslim leaders implement it throughout society from the top on down to the lowest levels.

In countries where Sharia law does not yet exist, it is the responsibility of Muslims who live in these societies to seek changes that will lead to implementing the immutable legal and moral mandates of the Sharia. As will be discussed throughout the remainder of this chapter, top-down Premodern approaches to governing, whether in the traditions of Augustine or Islam,

as understood by Awan, clash head-on with the democratic changes that accompanied the rise of modernity.⁶

MODERN

With the rise of the European Renaissance, a new vision of political authority began to emerge in Western culture. While Niccolo Machiavelli (1469–1526) is normally regarded as the supreme advocate of a princely system based on cynical manipulation of public image and political power, there is another side to his search for the ideal form of governance. He was a strong advocate of a republican form of governance based on virtue and a mixed constitution that involves a balance between the nobility and the population as a whole.⁷ Machiavelli's ideas parallel those of Aristotle, who championed mixed polity as the form that most closely approximates the golden mean. In this sense, Machiavelli was a transitional figure between Premodernity and Modernity.

Credit goes to British writer Thomas Hobbes for articulating the beginning of modern political thought. Central to his concerns were the themes of individualism, constitutionalism, and popular sovereignty. Like Augustine, Hobbes, as stated in chapter 3, was a pessimist who falls on the negative side of the good-evil polarity. It was Hobbes who held that the original pre-social state of nature can be characterized best as a war of all against all. It is a condition of pure misery, and life is nasty, brutish, and short.

Having lived during the mid-17th century, when England was consumed by the atrocities of civil war, Hobbes no doubt observed first-hand and then wrote about human nature at its worst. In terms of the definitions set down at the start of this chapter, he experienced the anarchy end of the tyranny-chaos spectrum, where power and authority disintegrate and society becomes engulfed in chaos and bloody conflict. In the midst of relentless mayhem, he became convinced that there was only one way to end it: through the formation of a social contract, a constitution whereby all individuals would mutually consent to stop the brutality and restrain their selfish pursuit of power.

Hobbes believed that this could be achieved voluntarily if everyone agreed to invest all power and authority in a single sovereign, a Leviathan as he called it, to enforce the peace and punish those who violate it and victimize others in the process.⁸ Every citizen has a right to personal security and freedom from violence. Since this is not possible in the original state of nature, it becomes necessary for everyone to unite by forming a social contract that will secure their collective well-being.

It is ironic that Hobbes's approach to overcoming political turmoil is to put power in the hands of a single leader elected under the democratic doctrine of popular sovereignty, which allows all individuals the right to participate in the process by which the sovereign who will reign over them is chosen. Another way to say this is that in Hobbes's view, the way to end

the chaos end of the tyranny-chaos continuum is for the populace as a whole to create a top-down, strong arm government.

Much can be said in support of Hobbes's desire to end the chaotic civil war that plunged England into political turmoil during the mid-17th century. At the same time, in his efforts to bring the chaos of his time to an end, he concentrated total political power in the hands of a single sovereign, which opened the door to the tyranny end of the political spectrum. From the perspective of Hobbes's own pessimistic view of human nature, it takes only a small step of the imagination to envision how an initially peaceful and security-conscious Leviathan could become converted into a capricious tyrant.

When Hobbes was confronted with this possibility, he had a ready response. If an elected Leviathan becomes oppressive, the citizens hold the power to throw the tyrant out of office for violating the terms of the social contract. The sovereign would forfeit the right to rule due to his failure to secure the peace and safety of society as a whole. If and when this happens, citizens will exercise their collective will by choosing another ruler to reign over them, a tough but benevolent sovereign committed to their collective interests.

In Hobbes's approach to creating political stability, the people as a whole protect themselves from sliding down the slippery slope toward tyranny. Nonetheless, as is readily apparent, his solution to the perennial problems of power and authority shares much in common with the traditions of both Augustine and Islam. The main difference between these two Premodern approaches and Hobbes's early Modern method is the role that citizens play in the process of forming a mutually beneficial system of top-down governance.

For Augustine, God ordains monarchy. For Islam, Allah charges Muslim jurists and rulers with the task of implementing the Sharia. In both cases, the role of the citizen is to submit to God's will as religious elites define it. For Hobbes, it is the sovereign who must submit to the will of the people based on their need for security. What makes Hobbes's ideas Modern rather than Premodern is that he grounds the legitimate use of political power in the citizens' collective will, as expressed through a social contract rather than through religiously sanctioned views of the need for monarchical control of sinful behavior (as in the case of Augustine) or in the imposition of revelation-based moral and legal codes (as in the case of traditional Islam).

In short, while Hobbes's political ideas place him in the Modern rather than the Premodern world, he can accurately be called a bridge thinker. His viewpoint contains top-down as well as bottom-up ideas; and in the final analysis, it was his negative view of human nature that drove him to call for the selection of a solitary sovereign to end the ongoing chaos that the seemingly endless British civil war created during his lifetime. After Hobbes, all that remained was to separate the call for a Leviathan from the development of democratic ideas. John Locke and others responded to this challenge.

As described in chapter 3, John Locke belongs to a group of human nature optimists who emphasize good over evil. For Locke, the inhabitants of the original state of nature live together in perfect Freedom and respect each other's right to life and property. At the same time, Locke remained acutely aware that there needed to be political safeguards against the selfish inclinations of some individuals who would use their Freedom to oppress others. Thus, like Hobbes before him, he called for the formation of a social contract that would secure the peace and protect every person's rights.

However, unlike Hobbes, Locke did not advocate for a mighty Leviathan to keep humanity's predatory impulses under control. Instead, Locke's image of the social contract involved the creation of a government with limited powers. In his view, there is nothing inherent in the formation of a strong central government that would keep a solitary sovereign from acting out of the same self-serving impulses that Hobbes assumed motivated everyone else. In Locke's view, the history of monarchy demonstrates that highly concentrated power in the hands of one or a few rulers leads to abuses against the mass of ordinary citizens.

Since human nature is innately good rather than evil, Locke reasoned that the social contract requires just enough government to permit the continuing expression of Freedom or liberty while still controlling those who would try to destroy it. In addition, he separated the legislative and executive functions of government into separate branches so as not to over-concentrate political power in the hands of a few. He believed that the legislative branch should be the supreme authority in any commonwealth and be held accountable to citizens through elections.

The executive branch exists to carry out the policies of the legislature. In this way, according to Locke, sovereignty does not reside in any single individual, as Hobbes had advocated. Rather, political sovereignty is an expression of the popular will as a whole.⁹ Locke recognized that no social contract system could perfectly balance power between the legislative and executive branches, and the later-to-be-added judiciary, so as to completely eliminate the possibility of abuse. However, distributing power throughout multiple branches of government reduces the probability that this might happen. Thus, while Locke accepts, along with Hobbes, that government is accountable to the populace, he moves the form of government in the direction of modern democracy.

Jean-Jacques Rousseau (1712–1778) followed in Locke's footsteps, even though he differed with Locke on many issues. Building on the doctrine of popular sovereignty, Locke occupies middle ground between Hobbes's yearning for a strong armed Leviathan and Rousseau's more radical interpretation of the role of the popular will in the establishment of democracy. As shown in chapter 3, Rousseau shared Locke's optimistic view of humanity. He referred to the inhabitants of the original state of nature as noble savages. When he compared the social conditions of his time against this ideal primal state, he saw only corruption and degradation. The primordial

Freedom of the noble savage had given way to slavery. Wherever he looked, he saw humanity in chains, which fueled his passion to find a way to eliminate this slavery and reclaim Freedom.

Rousseau was convinced that the only way to return society to its original state was to go forward with a new conception of the social contract founded on the “general will.”¹⁰ His main purpose in advocating for the general will (the consensus of all citizens) was to help individuals direct their energies away from the pursuit of private interests and toward the common good. For Rousseau, rights are not based merely on the idea of an individual Freedom that exists in the original state of nature, but are sanctioned by the community that defines them as legitimate.

The general will serves to mediate the tension that naturally exists between the individual and society by creating both a moral and civil community. When citizens express their desires collectively, they never err because the general will is always right and fair. It not only guides the future development of society as a whole, but it also provides every individual with an opportunity for self-development that is anchored in the quest for the common good. In Rousseau’s eyes, this means that there is no other form of sovereignty than one grounded in the popular will. The people themselves, acting through their general will, are accountable only to themselves. For all citizens, sovereignty resides in themselves.

The general will is indivisible, which means that the people cannot be disconnected from their own sovereignty. Through democratic procedures, the people create their own legitimate form of political power. Once established, government exists merely to carry out the desires of the general will. When this occurs, according to Rousseau, people reclaim the Freedom they enjoyed in the original state of nature. Sovereignty does not transfer to government officials, who remain accountable to the general will. Furthermore, because sovereignty remains attached to the general will, the chance that the people will lose their Freedom by drifting toward slavery is vastly diminished if not eliminated altogether.

Should anyone disagree with the decisions of the general will and desire an alternative course of action other than the one that the people have determined through their democratically chosen government, Rousseau maintains that they can be “forced to be free.” That is to say, it is the duty of every citizen to conform to the governmental policies and procedures that have been established by the general will. The reason is clear: If it is through the general will that the people regain their Freedom, then any action that threatens to return society to slavery, such as nonconformity to the general will, must be resisted. In other words, for the sake of their own Freedom, nonconformists can be compelled to conform.

It is at this point that Rousseau left himself vulnerable to opponents who pointed out that the very idea of forcing someone to be free sounds like totalitarianism, even if the government is democratically elected and accountable to the general will. Critics claimed that all Rousseau did was

substitute a bottom-up form of tyranny for a top-down one. In the final analysis, tyranny is tyranny no matter what its origin. If the rights of nonconformists can be so easily set aside, in the final analysis it does not matter whether depriving citizens of their rights can be justified through monarchy, aristocracy, oligarchy, or democracy. The outcome is the same. In whatever form, government is tyrannical if it fails to safeguard the freedoms of minorities and nonconformists.

Despite this criticism, Rousseau's vision made a permanent impact on the development of democracy, especially in terms of inspiring the leaders of the French Revolution of 1789. In combination with Locke, he helped move the Modern world away from traditional forms of monarchy. Later, other writers would also make the case for democracy and build on the ideas of both Locke and Rousseau, especially John Stuart Mill who will be discussed shortly.

However, not everyone agreed with the direction that democracy was taking as described by Rousseau and as it was manifested during the French Revolution under the abstract ideals of Liberty, Equality, and Fraternity. In particular, it was British political writer Edmund Burke (1729–1797) who stood staunchly against the French Revolution, even as he supported the American colonial rebellion against England in 1775. Like Locke and Rousseau, Burke supported the move toward some form of constitutionalism in the formation of government.

What he disagreed with was the way in which the French revolutionaries went about it. For Burke, they were too radically innovative in their destruction of the monarchy and creation of democracy. They failed to pay respect to the type of time-tested traditions out of which the British Constitution, which in the main he supported, had been carefully constructed. Burke sought to balance monarchic, aristocratic, and democratic ideals.¹¹ In this sense, his preferred form of governance parallels that of Aristotle, whose promotion for the golden mean prompted him to perceive that the best kind of polity combines oligarchy and democracy and includes a large middle class.

As a result of his writings, Burke is generally recognized as the founder of the modern constitutional conservative movement. This implies that political innovators ought not to impose novel democratic structures that break radically with the past. This is a sure formula for chaos that will lead to the reemergence of the very tyranny that the imposition of democracy is designed to overcome. Rather, the form of democracy that stands the best chance of long-term success is one that evolves gradually out of a society's traditions and integrates their strengths. In short, according to Burke, constitutional democracy should combine the best of both the old and the new, which prevents the occurrence of the old political adage, out of chaos comes tyranny.

Opponents of Burke maintain that his emphasis on gradualism serves mainly to support the status quo and protect monarchial and other elitist

privileges that are the source of the social injustices that revolutionaries seek to change. Nonetheless, Burke can rightly be considered modern in his support for a balanced form of constitutionalism that secures legal protections against the tyrannical treatment of vulnerable individuals or groups. The final step toward articulating the principles of constitutionalism and individualism that are the hallmarks of modern democracy was taken by John Stuart Mill (1806–1873).

Like Aristotle, Mill accepted the premise that the goal of every individual is the achievement of happiness, even though he defined this in terms of external consequences for society as a whole (utilitarianism),¹² rather than through developing the inner virtue of the golden mean. For Mill, the road to happiness lies through liberty.¹³ The only reason government ought to exercise coercion over any citizen is to prevent him or her from harming others. Short of this, government's role is to protect every individual's right to free thought, to believe as his or her conscience dictates, and to the public expression of opinions and tastes.

Mill also held that individuals have a right to form free associations with others. He vigorously defended legal protections for an independent press that serves as an avenue for keeping the public informed of critical matters. He was an early advocate of extending educational and voting rights to women. This is consistent with his utilitarian conviction that the greatest good, that is, happiness, increases when the greatest number of both males and females enjoy the same privileges.

The type of political assembly that produces the best consequences for society, according to Mill, is representative constitutional democracy, because it combines liberty and legitimate authority. Representative democracy is preferable to popular democracy for this reason. As the population grows, popular democracy, which works well in small towns, becomes less practical and more difficult to practice successfully. Representative democracy is more adaptable under the condition of population growth and can be modified as necessary to fit changing circumstances. The population elects its legislative leaders, who in turn control the executive branch of government. Finally, for Mill, minority voices and opposition groups should be included in the legislature through proportional representation.

DEMOCRACY ON THE MOVE

Amidst the debates and disagreements stretching from Hobbes to Mill, the Modern world has moved progressively in the direction of democracy. Based on empirical trends that have unfolded for the past 200 years, it would not be far from the mark to conclude that, like the regulated marketplace, political democracy is one of the major correlates of modernity. This does not mean that the growth of democracy around the world has proceeded without interruption or setbacks. It has. However, as Figure 9.1

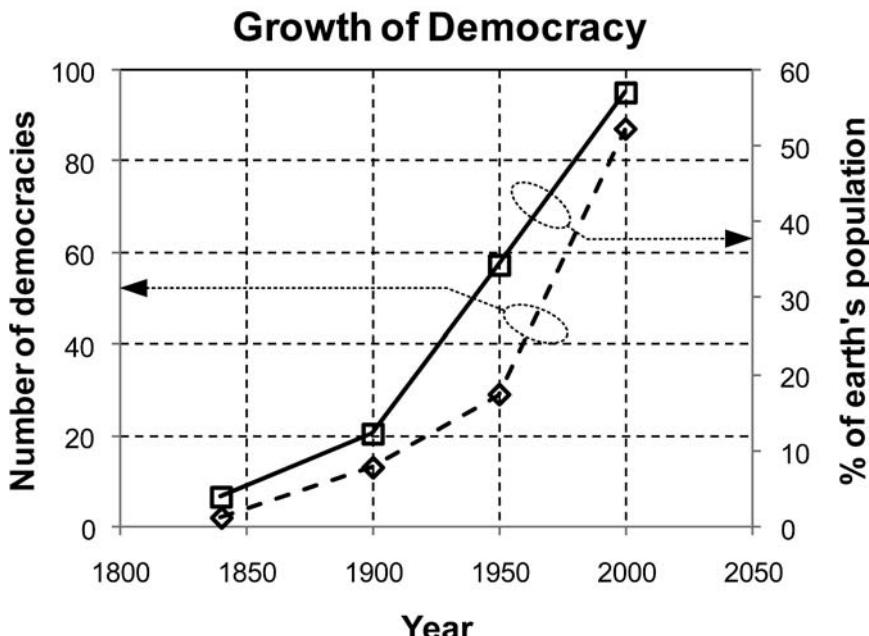


Figure 9.1 Number of Democracies and Percent of Earth's Population.

shows, on the whole the long-term trend has resulted in the replacement of top-down Premodern hierarchical structures with modern democratic systems that operate from the bottom up.

The following examples provide ample evidence of this transformation. According to one source, in 1840 only two democratic societies existed in the world, the United States and the United Kingdom, which covered 3.9 percent of the earth's population. By 1900, this number increased to 13, including 12.1 percent of the planet's population. By mid-century, 29 nations encompassing 34.3 percent of the world's population were living under democratic rule. Then, in the late 1990s, for the first time in human history democracy embraced 50 percent of the world's population. The trend continued, and by 2000 the number of democracies expanded to 87 and incorporated 57.1 percent of the earth's people. By the end of the 21st century, it is projected that 90 percent of the world's population will be living in countries with some form of democratic governance.¹⁴

Only two major contenders emerged during the 20th century to challenge the long-term trend toward democracy in the Modern world. The first is Fascism, which the Allied Forces destroyed during the 1940s. The second is Marxism-Communism, which reached its zenith in the mid to late 20th century before the fall of the Berlin wall in 1989 and the dissolution of the

Soviet Union during the 1990s. In addition, most of the Eastern European and Eurasian nations of the post-Soviet era have moved increasingly in the direction of democratic development.¹⁵

Of the few remaining countries with Communist governments, China is the largest. With the introduction of marketplace principles to its economy over the past two decades, China has become a hybrid society that has been moving toward developing some form of shared governance that is compatible with its cultural traditions. According to one author, as the 21st century unfolds, this possibility grows stronger with each passing year, especially if China's economy continues its pattern of annual expansion of five percent or more.¹⁶ If this trend continues, given that China includes one-fifth of the earth's population, the worldwide spread of democracy would take a major leap forward toward the goal of covering 90 percent of the planet by the end of the century.

However, despite the discernable successes that have brought democracy to its current stage of worldwide development, many observers question whether this long-term trend will continue into the foreseeable future. The growth of global terrorism by religious fanatics who seek to impose their revelation-based moral codes and Premodern, centralized political structures on others has opened a new era of challenge to the steady expansion of democracy around the earth.

At stake is a possible reversal of this democratic trend in the direction of autocratic government by Premodern-type religious elites who claim to possess a universal truth that God has commanded them to force on everyone. During the past two decades, the rise of suicide bombings that involve the carefully planned killing of innocent civilians and others epitomizes this anti-democratic trend. For terrorists, suicide bombings and other forms of murderous behavior are the means by which they believe they are carrying out the will of God. Like Nazism and Leninist-Stalinist communism in the 20th century, terrorism is the major scourge that threatens democracy in the 21st. How long it will last throughout the remainder of the 21st century and beyond is a question that can be answered only in the future. No doubt, much time and many resources will be spent in the global struggle to eradicate it.

In addition to terrorism, other threats to the continuing expansion of democracy also exist. Each year, the Freedom House, one of the major watchdog organizations to assess the status of democracy around the world, classifies 193 nations according to whether liberties are either growing or in decline. In its 2007 review, the Freedom House judged that 90 countries (47% of all nations) were Free, 58 (30% of nations) were Partially Free, and 45 (23% of nations) were Not Free. In combination, 148 of the 193 nations were either Free or Partially Free. These numbers demonstrate how the blanket of democracy has spread to cover most of the world.

At the same time, according to the Freedom House, there is no guarantee that this long-term trend will continue in the future, even if terrorism

is abolished. Other forces are at play, and they bear directly on what will happen to the future of democracy. In no particular order of priority, these include: (1) the growing disparities in income and wealth in some of the world's largest nations, including the United States, China, Russia, and India; (2) entrenched autocracies in the Middle East and other regions of the world; (3) Web wars and the centralized control of electronic communication technology; (4) the spread of weapons of mass destruction; (5) pervasive governmental corruption in many countries where politicians cater to economic elites; (6) disruptive migration that leads to cultural clashes within nations; and (7) the growth of international crime networks. According to the Freedom House, these factors are creating "Freedom stagnation" around the world. Furthermore, it is unclear whether in combination they will be able to stop or even reverse the long-term trend toward democracy.¹⁷

The Freedom House does not stand alone in its assessment that the momentum toward worldwide democracy could suffer a setback. According to a report issued by the Carnegie Project on Democracy and the Rule of Law, during the last decade of the 20th century there emerged numerous governments that are neither democratic nor autocratic. Rather, they are a combination of both; they are semi-authoritarian. Even though these regimes include multiple parties and foster a civil society, in reality very little political competition actually exists. While there is much talk of democracy in countries like Pakistan, Malaysia, sub-Saharan Africa, the Balkans, and parts of Latin America, like Venezuela, their rulers frequently violate many of its basic practices.¹⁸

Semi-authoritarian regimes may not be democracies in transition. Instead, they appear to be alternative structures to both democracy and authoritarianism. In other words, combining the language of both the Freedom House and the Carnegie Project, Freedom stagnation may be attributable to the emergence of semi-authoritarian leaders who give lip service to the world's desire for democracy, but who actually manipulate their political structures like traditional, top-down autocrats.

Also, as the Freedom House has reported, there still remain among the Not Free nations of the world 45 dictators who hold control over both the political and economic power of their nations. The impact of democracy on these remaining despots is even less than it is on semi-autocrats, who have learned to balance democratic rhetoric with authoritarian action.¹⁹

Even in countries with political systems that are either authoritarian or semi-authoritarian, the ideals of democracy continue to inspire opposition political movements. At the same time, many factors have emerged during the past two decades to hold back or even forestall the uninterrupted expansion of democracy. This means that the pattern of democratic growth is in a slow-down period with an uncertain future. Whether semi-autocrats will move toward greater democracy or secular and religious dictators will yield to popular voices that advocate democratic changes apart from violent revolution remains to be seen. Whichever way the future goes, it is clear that

political pressures to spread democracy throughout the emerging global village will continue unabated.

CONCLUSION

With the advent of modernity, the human struggle to find the best form of government that will steer a peaceful and stable middle course between the destructive dualism of tyranny and chaos has moved steadily in one direction: toward democracy. The roots of this momentum can be found in the writings of ancient Greek philosophers, especially Aristotle. However, prior to the Western Renaissance and Enlightenment, the dominant political structures concentrated control in the hands of monarchs and religious elites who governed a largely preliterate populace from the top down.

Aristotle's vision of finding the golden mean between the extreme of excess and deficiency laid the foundation for writers like Machiavelli, whose advice to princes to do what was necessary to hold on to power overshadowed his advocacy of a mixed constitutional form of republican polity built on virtue. More than any other writer, it was Hobbes who opened the door to modern forms of governance based on popular consensus. Despite his pessimistic view of human nature and his call for a strong-armed Leviathan, he grounded government in the will of the people.

After Hobbes laid the foundation for a social contract approach to government, numerous writers who possessed a more optimistic view of human nature took the doctrine of popular sovereignty in a democratic direction. Like Aristotle and Machiavelli, Burke supported a balanced constitutional polity that combined monarchy, aristocracy, and democracy. Rousseau favored building democratic rule on the general will that he believed would reestablish the primal freedoms that humanity enjoyed in the original state of nature but that society had eliminated through corruption. Rousseau's critics pointed out that he opened the door to tyranny by proposing that individuals could be forced to be free if they opposed the political policies produced by general will.

Locke and Mill, who also stood in the tradition of popular constitutional sovereignty, expanded the principles of democracy by calling for the separation of legislative and executive powers (and eventually a separate judiciary) and for protecting the rights of individuals, minorities, and opponents of popularly elected officials. For Mill in particular, the only justification for government intervention into the private lives of citizens is to keep them from harming each other or society as a whole. Mill believed that all people are motivated by the pursuit of happiness and that the odds of achieving this goal are enhanced through liberty.

As a result of centuries of struggle to define the nature of Freedom and to develop popular political structures that support it, one of the world's major long-term trends has been the spread of democracy around the world. Whereas at the start of the 18th century few countries enjoyed the kinds of

freedoms associated with democratic societies, according to the Freedom House, by the year 2007, out of a world total of 193 nations, 90 were Free and 58 were Partially Free. This combined total of 148 Free or Partially Free nations leaves 45 nations that are Not Free.

During the early 21st century, the only serious worldwide autocratic contenders to democracy are radical Muslims who seek to create elitist cleric-based Islamic states wherever possible through terrorism and the imposition of the ancient moral and legal codes of the Sharia. Non-Muslim democratic societies, as well as moderate Muslims who are searching for ways to combine Islam, democracy, and Modernism will be confronting this anti-democratic threat well into the new millennium. In addition, the pressures to introduce more democratic policies and protections for individual rights will continue in centrally controlled Muslim societies such as Saudi Arabia.

While the majority of the world's nations have moved steadily in the direction of embracing democratic reforms, there is no guarantee that this will continue without interruption. According to the Freedom House, there currently exist several slow-down or push-back forces that are causing Freedom stagnation and are pressing against the steady spread of democracy. These include the growing wealth gaps in many nations, entrenched autocracies, centralized control of electronic communications, international migration and cultural clashes, the growing threat of weapons of mass destruction, and so on. Among the 45 nations (or 23% of all nations) that are Not Free, there are few indications that they are enthusiastic about embracing the long-term trend toward democracy. No doubt, as autocrats and semi-autocrats have always done, they will do whatever is necessary to hold onto power through intimidation and violence against opposition. Only in time will it become known whether or not they can do so indefinitely.

Despite resistance by the world's remaining despotic regimes and rulers to the long-term global trend toward democracy, one issue remains clear. The pressure to expand Freedom into the far corners of every country will not go away. If the past is any guide to the future, this ongoing worldwide momentum (however temporarily forestalled) will sooner or later eat away at the structures of resistance as currently excluded citizens struggle to have a voice in determining the policies and procedures by which they are governed. In chapter 10, this issue along with the others examined in previous chapters will be discussed in detail as humanity heads into the future.

NOTES

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3. Aristotle, *Politics*, trans. Benjamin Jowett (New York: Random House, 1943).
4. Augustine's two most famous books are *The City of God* (New York: Doubleday & Co., 1958), and *Confessions*, trans. R. S. Pine-Coffin (New York: Penguin Classics, 1961).
5. Mahmud Awan, "The Faith Community and the World Order in the Perspective of Islam," in *Trialogue of the Abrahamic Faiths*, ed. Ismail Raji al Faruqi, 4th ed. (Beltsville, Md.: Amana Publications), chap. 10.
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7. Niccolo Machiavelli, *The Discourses*, in *The Prince and the Discourses*, Modern Library Edition (New York: Random House, 1940).
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14. George Modelski and Gardner Perry III, "'Democratization in Long Perspective' Revisited," *Technological Forecasting and Social Change* 69, no. 4 (2002): 359–376, table 1.
15. Jeannette Goehring and Amanda Schnetzer, eds., *Nations in Transit 2005: Democratization in East Central Europe and Eurasia* (New York: Freedom House; Lanham, Md.: Rowman & Littlefield, 2005).
16. Bruce Gilley, *China's Democratic Future: How It Will Happen and Where It Will Lead* (New York: Columbia University Press, 2004).
17. Arch Puddington and others, eds., *Freedom in the World 2007: The Annual Survey of Political Rights and Civil Liberties* (Lanham, Md.: Rowman & Littlefield, 2007). Also see Georg Sorensen, *Democracy and Democratization: Processes and Prospects in a Changing World*, 3rd ed. (Boulder, Colo.: Westview, 2008), and Mika Mannermaa and others, eds., *Democracy and Futures* (Helsinki: Parliament of Finland Committee for the Future, 2006).
18. Marina Ottaway, *Democracy Challenged: The Rise of Semi-Authoritarianism* (Washington, DC: Carnegie Endowment for International Peace, Brooking Institution Press, 2003).
19. Mark Palmer, *Breaking the Real Axis of Evil: How to Oust the World's Last Dictators by 2025* (Lanham, Md.: Rowman & Littlefield, 2003).

CHAPTER 10

Heading into the Future

As the global village heads into the future, how will Truth and Freedom be affected? This chapter will answer this question using the scenario approach to gain foresight of the future. The preceding chapters approached the issue of social change from many angles. In order to focus on specific topics, chapters 2 and 3 laid out the broad framework of modernization and the permanent polarities within which past transformations have occurred to bring the world to its present state and within which future changes will likely occur.

Subsequent chapters identified the role that modern science has played in this process. Of particular significance is that even at the most basic level of the hard physical sciences, the discoveries of Heisenberg, Lorenz, and others have made room for the butterflies of indeterminacy to take their place next to and within the determinate causalities of Newton's and Einstein's big machine. In other words, in truth, Freedom is built into the universe and plays out within the patterned and probabilistic structures of natural law. In all probability, the complex interaction between determinacy and indeterminacy, which occurs in the bio-chemical and neurological connections of the human brain, is the enigmatic cause of consciousness and the mind's awareness of external reality—as well as the variety of ways in which different individuals and cultures pursue their quest for Truth.

In addition, as electronic communications and mass transportation continue to drive the growth of the global village, the leaders and laity of the world's spiritual traditions will encounter each other as never before in human history. The search for a hidden spiritual reality that the vast majority of the planet's population believe created and sustains the physical

cosmos will go on unabated. Science and religion will take their places beside each other—compatibly in most cases. While a minority will adopt a strictly materialistic view of the universe, and religious fundamentalists will reject many of the discoveries of modern science in order to defend Pre-modern views that are based on centuries-old sacred texts, the majority will follow the pathway of compatibility in the foreseeable future.

This means that in the quest for meaning in this life as well as in anticipation of after life, the competition among the world's religions to win the hearts and minds of future generations will be vigorous, as the devotees of individual religions fan out around the world and seek to persuade others of the Truth of their worldviews. It can be stated with a high degree of certainty that the future of the global village will be greatly affected by how interreligious competition, and in some cases violent conflict, evolves and will be resolved.

The irony that lies underneath the diverse worldviews of the world religions is that there already exists and has existed for many millennia a universal core of moral standards that cuts across all of them. As Figure 10.1 shows below, while the followers of the world's religions differ widely in the worldviews that are the main source of their disagreements, they adhere to a common core of values.

Even though theologians anchor values in the God on high or within the spiritual self, and philosophers use reason alone to identify them, they all embrace universally shared moral standards. As has been discussed, this involves the development of desirable character traits such as living by Truth, kindness, mercy, compassion, forgiveness, love, justice, and many more that contribute to enhancing society's moral quality. Uniting around common values rather than wrangling over worldviews will help move

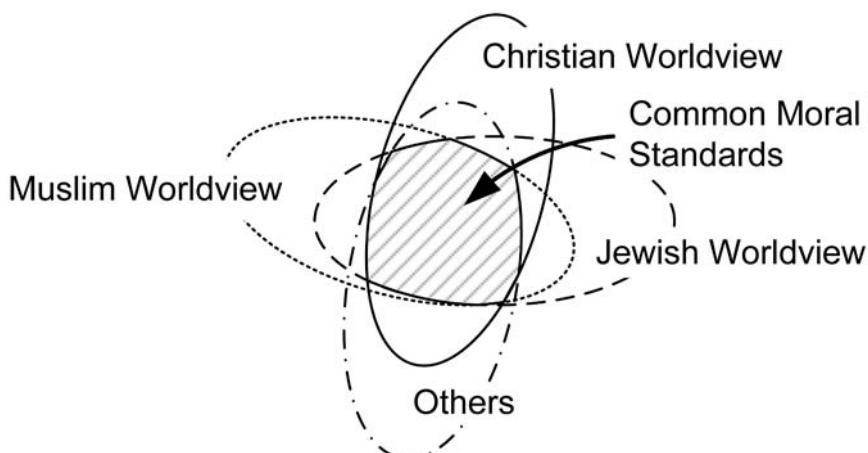


Figure 10.1 Common Moral Standards among Diverse Religious Worldviews.

the global village in a direction of greater peace and justice and away from hatred and hostility.

Despite ongoing disagreements among the world's diverse religions, all societies will continue their struggle to obtain maximum economic well-being and political security for their citizens. As has been demonstrated, one of the world's major trends has been in the direction of some form of government-regulated marketplace system. Throughout the 20th century, two alternative approaches fell short: unregulated capitalism and Soviet-style state ownership and control.

From a strictly empirical perspective, starting with Keynes, history has shown that balancing the tension between (1) sustaining the benefits of marketplace competition and (2) providing for the economic needs of an entire population works best through public intervention, even though societies differ in how, where, and when this ought to occur. Using Aristotle's image of the golden mean, when it comes to the economy, both complete absence of government intervention and total government control appear to be bad things. At the same time, finding the right balance between government and the economy is no easy thing.

In addition, little doubt exists that for the past four centuries, one of the Modern world's major trends has been in the direction of democracy. In less than a few hundred years, governments on every continent have felt the pulse of democratic change. In its tracking and annual surveys of democratic developments around the world, the Freedom House has shown that nearly 60 percent of the earth's population lives under some form of democratic governance at the start of the 21st century. The remaining 40 percent reside in countries governed by autocratic regimes or semi-autocratic leaders who talk democracy but practice top-down autocratic rule. Whether or not this long-term democratic trend will extend into the future, stall at its current level, or experience a reversal is an open question that only the future can answer.

Thus, as the above summary shows, the future of Truth and Freedom in the global village will emerge out of a combination of several driving forces. These include (1) advancements in science and technology and related stages of transformations in cybernetic, genetics, and beyond; (2) growing socio-political complexities that combine both determinate and indeterminate factors of chance and choice; (3) competition and conflict among the world's diverse religions; (4) the willingness of dissimilar groups to embrace universal values; (5) the capacity of government-regulated marketplace systems to continue providing for the material well-being of citizens; and (6) the determination and potential success of nations everywhere to advance and sustain democracy.

Because of the indeterminate nature of social change, that is, because of Freedom, the future direction of these driving forces cannot be predicted with certainty. Nor can the interaction—often called cross-impact—that will occur among them. However, what can be known with certainty is that the

actual future that is unfolding on the horizon of the present will combine all of them in some way, shape, or form. This means that there are many potential combinations that could steer the future in one direction or another. Stated differently, many alternative futures are embedded in the present. The remainder of this chapter will discuss these in terms of the scenario method that futurists use to develop foresight and to forecast with as much realism and accuracy as possible what the actual future that is emerging out of the present might be.

DRIVING FORCES THAT WILL SHAPE THE FUTURE

As a general rule, modern futurists do not try to predict the future. Rather, they forecast alternative scenarios and then watch empirical trends and events to determine which of the forecasts is unfolding to be the most probable.¹ However, given the uncertainties associated with social change, no single forecast can be set in concrete. What appears to be the most probable future one day can be replaced by another as trends change and dramatic events alter the course of the present. This is what makes predicting the future with a high degree of accuracy no simple task. Because Freedom is one of the factors that greatly influences the unfolding of the future, the likelihood of knowing the direction of the future with complete certainty is low. From the perspective of the present, there is not just one future, but many possible futures, some of which are more probable than others and all of which are subject to change and varying degrees of uncertainty.

In addition, the human capacity to choose alternative ways to react to future decisions and situations that have not yet occurred makes prediction nearly impossible. The process of thinking, weighing alternatives, deciding, acting, and then responding to these actions with further thinking, weighing of new alternatives, deciding, and acting again is an ongoing cycle that never ends in human affairs. It is through a combination of choice, chance, and constantly changing trends, along with the unforeseen interaction effects that they have on each other (like the proverbial butterfly), that the future takes shape. Thus, identifying the main driving forces and envisioning different ways in which they might cross-impact is the essence of the futuring imagination.

The scenarios that are described below are based on the driving forces that have been discussed in depth throughout this book and summarized briefly above. They can be grouped into five main categories that futurists often use to create images of the future. These categories are society, technology, economics, politics, and environment, which go by the acronym STEPE.² The STEPE approach will be described below and then used to create alternative futures of Truth and Freedom in the global village.

The broad category of society includes several factors. One of the most important consists of changing beliefs, values, and subsequent behavior. Previous chapters have included many examples that altered the course of

history. Ideas that were once considered novel became normal as their impact irreversibly altered the direction of the future. One of the most important innovations is Roger Bacon's belief that any knowledge of nature and the laws that govern it should stem from empirical observations and mathematical measurements and not from religious texts or external authorities. This idea led to the development of modern science, which contributed in no small measure to the rise of Modernism and its pervasive changes.

The technological changes that arose from scientific discoveries transformed the centuries-old agrarian and feudal pattern into modern industrial-urban society. Electronic communication and mass transportation continue to transform the earth into an emerging global village where worldview competition between different religious and philosophical groups is intensifying. In the realm of economics, Adam Smith's beliefs about the benefits of capitalism, as modified by John M. Keynes, have spread steadily around the world. Even the Communist experiments of the 20th century, which derived their inspiration from Karl Marx, could not ultimately derail these ideas, as witnessed by the dissolution of the Soviet Union in the 1990s and China's progressive adoption of the marketplace system.

For the past two centuries, value shifts toward the politics of democracy and away from autocracy have also spread steadily around the world, even though the future fate of this long-term trend faces a period of uncertainty at the start of the 21st century. Even though it was not discussed in previous chapters, during the last third of the 20th century, concern for the environment, called the green revolution, has emerged as one of the most significant mega-trends that will influence the future of the planet during the 21st century and beyond.

In other words, the beliefs and values that a society accepts have not only shaped its past but also mold its future in the realms of society, technology, economics, politics, and virtually every other area of human endeavor. This means that any community's long-term survival potential ultimately rests on its ability to create and sustain a culture that combines all these driving forces into a coherent pattern capable of ongoing adaptation to changing circumstances. How might these forces be integrated to create different scenarios of the future? And which scenario is most likely to become the actual future? The remainder of the book addresses these questions.

THE FUTURE OF TRUTH AND FREEDOM IN THE GLOBAL VILLAGE

This section of the book will involve the development of three different scenarios that forecast alternative futures of Truth and Freedom in the global village as it continues to evolve throughout the 21st century. All three scenarios will be possible and plausible, and any one of them stands a chance of becoming the actual future. The time period will extend to the year 2050. Many of the trends that will influence the direction of the future

are already visible, while others will arise unexpectedly during the next several decades.

In addition to trends, chance and choice—especially choice—will play a major role in how the future develops. Human choices are vital to the direction that any individual or community will take. In order for any group to survive and prosper for the long haul of history, it must make the right choices. The direction that the future will take will be determined in large measure by (1) decisions that are made in the present, as well as (2) decisions that will be made as the future unfolds. This means that one of the following three scenarios will be identified as the preferred choice because it possesses the highest potential to contribute to strengthening the one precondition that helps ensure any given society's long-term viability: the quest for Truth and the Freedom to pursue it.

Scenario 1: Going Forward by Backing Up

It is the year 2050 and many changes have occurred since the first decade of the new century. For four decades the planet has been sliding toward what some call the good old days. As the century began to unfold, many of the anxieties that accompanied the tumultuous changes of the first decade settled down into the comfortable patterns of the past. In truth, however, it turned out to be far better for some than for others.

As the new century emerged, the dreaded uncertainty that the world was spinning out of control and heading for an inevitable Armageddon began to disappear. Relief set in when the world did not end in one gigantic bilow of radioactive smoke or a catastrophic viral plague during the second decade of the century. The near insanity that many believed was driving the planet off the cliff of self-destruction faded as a lost golden era returned. A collective sigh of relief could be heard everywhere around the earth. The future was going forward by backing up.

The long-term trend toward the integration of diverse cultures underwent a dramatic reversal. The first signs of this drift into the past appeared around the middle of the second decade as stiff resistance to the realities of the emerging global village picked up momentum. The once-isolated communities that were encountering each other for the first time in the global village began closing ranks and shutting themselves off from outsiders who threatened their sense of historic solidarity. Individuals who migrated to other countries created separate enclaves in their new host nations. Others returned to their native lands in order to reestablish old ties that filled their lives with deeper meaning.

There was little doubt in the minds of many that the masses of people simply could not cope with the accelerated pace of social change that seemed to have no clear end in sight. Change for the sake of change started taking its toll as the early 20th-century sociologist Durkheim and others said it would. In simple terms, too much was happening too fast and people

everywhere wanted nothing to do with it as their feelings of stability began to erode.

While electronic communication and mass transportation had brought together as never before the world's diverse peoples, the unacceptable concessions that they had to make to each other's differences pushed them apart. As a result, for millions, the familiarities of the past proved to have a stronger pull than the uncertainties of the future. The stresses that pluralism imposed on the emerging global village of the early 21st century proved to be too much to manage.

By 2050, the earlier mood of optimism had undergone a dramatic change as the planet became increasingly schizophrenic. Those who went forward by backing up experienced anew the comforts of familiar ways. This brought them relief; it was the best of times. For others, returning to past ways led to growing hatred and hostility. In the search to broaden their control wherever possible, they engaged in a deadlocked struggle against believers with different worldviews. For the majority of those who became caught up in the bloody conflicts, especially the innocent, it was the worst of times.

By mid-century, the fear of an impending Armageddon had returned in full force as a growing number of terrorists sought to turn the devastating potential of high-tech weapons of mass destruction on their enemies. It was as if the endless struggle between good and evil that dwells in the heart of human nature had taken a turn for the worse. The irony did not go unnoticed. Amidst the resurgence of contentment that returning to the past brought to multitudes of people, there also reappeared a deep anxiety, anchored in fear, over the possibility of a cataclysmic future.

Slowly but surely, Premodern ways of thinking reappeared. Inevitably, many of the taken-for-granted norms and perceptions of the Modern world were pushed to the cultural periphery where their influence faded into the shadows of virtual obscurity. Modern science especially felt the brunt of this return to the past. The voices of fundamentalism and advocates of creationism became more strident as the search for spiritual certainty gave way to intolerance of the idea of an open-ended universe whose origin and destiny seemed as random and unclear as the confusing future that confronted the emerging global village.

In addition, going forward by backing up led to weakening secularization, an erosion of separation of the sacred from the secular, and growing threats to religious freedom as the various faith traditions intensified their competition in an effort to gain control over the future. As the global village fragmented into multiple exclusivist communities, intolerance and inter-religious bigotry increased. Any possibility that the planet would move in the direction of embracing a universal set of moral standards that cuts across all worldviews disappeared as diverse faith communities of every stripe increased their condemnation of each other in the name of their sacred Truths.

The contradictions that affected widespread social changes in the realms of religion and culture had by mid-century settled into the area of economics as well. Two tendencies in particular gained momentum. The first involved the drift toward an unregulated marketplace of the kind that existed prior to the depression of the 1930s. The second moved in the opposite direction, toward greater state control and even ownership along the lines of an emergent socialism. As the future moved forward, the economic polarities of the past resurfaced.

In some nations, in the 2020s and 2030s, many new- and old-guard capitalists who succeeded in gaining political power stripped away layers of government regulations that they believed blocked the marketplace from reaching its fullest potential to create economic well-being. For them, the Keynesian innovations of the last half of the 20th century only suppressed the individual incentives that they believed were necessary to increase productivity to such a high level that its trickle-down effects could benefit everybody. Predictable results followed. Concern for protecting the environment weakened. Disparities between the rich and poor widened, markets became increasingly concentrated in the hands of fewer firms, and economic instabilities increased as the business cycle gyrated unpredictably.

These changes did not go unnoticed, and socialists in other countries pointed to the growing economic disparities and upheavals that marked a return to the good old days of unregulated—some critics called it “cowboy”—capitalism. In an effort to offset the drift toward excessive concentration of wealth in fewer hands, they enacted tough taxation laws to raise the funds necessary to provide cradle-to-grave social programs that covered everyone. The leaders of some countries began nationalizing privately held businesses to the chagrin of their owners. For many, the growing economic divisions of the mid-21st century paralleled the economic legacy of the mid-20th century during the height of the Cold War.

By 2050, the two-centuries-old trend toward democracy also started backing up, as the number of authoritarian and semi-authoritarian regimes expanded around the planet. A growing list of countries experienced their own version of Tiananmen Square as autocratic leaders and their police brigades squelched democratic movements and banned public demonstrations.

While most nations remained resolute in protecting their democratic traditions, it was unclear how far the anti-democratic trend of the mid-21st century would go before leveling off or resuming its earlier long-term momentum toward democracy. Many who sought the comforts of the past by escaping the stresses of the global village felt reassured by the social stability, however temporary, that powerful rulers imposed on their political landscapes.

In the final analysis, going forward by backing up into the past had left the citizens of 2050 with one overarching impression: The eventual triumph of Modern society over its Premodern predecessor no longer seemed

inevitable. By mid-century, the future direction of the global village was clouded with greater uncertainty as the reemergence of Premodern beliefs and behavior threatened to derail history's most influential mega-trend of the past four centuries—the modernization process itself.

Scenario 2: Going Forward by Standing Still

It is the year 2050 and not much has changed for the past four decades. For all intents and purposes, the same social balances that existed during the first decade of the new century stalled in place. Every time the proponents of any given position parried for advantage, opposing forces arose to stop them in their tracks. Many wanted to return to the good old days when life seemed more secure and less ambiguous. Others were struggling to cope with the new and different neighbors next door. It is as if the global village had evolved to a certain state and then could not go any further—either forward or backward.

The anxiety that the world was spinning out of control never abated. Many breathed a sigh of relief that the dreaded Armageddon had not occurred, even though the chance that it might still hung in the air like a proverbial rain-soaked cloud threatening to pour down on the earth at any moment. As time passed, the diverse citizens of the global village learned to live with this monster at the gate, shrugged their shoulders as if to say, "If it happens it happens. I can't do anything about it anyway," and got on with their lives.

The long-term trend toward the integration of diverse cultures followed the same pattern. Those who migrated away from their native lands to new nations gathered together with like-minded foreigners. Their encounters with "the other" at work or in public were cordial. At the same time, many consciously chose not to blend into the great "melting-pot culture" of the global village, choosing instead to preserve comfortable ethnic customs wherever possible. They learned how to sustain their identity amidst diverse identities and to make accommodations if necessary—without harboring hostility toward their new national hosts.

Not everyone reacted with the same degree of caution. Others reached beyond the boundaries of their history and embraced the new possibilities that they saw on the social horizon. However, their numbers were matched by the vast majority who chose the security of their traditional worldviews and values. This balancing act of going out and coming back lasted longer than anyone who lived at the start of the 21st century expected. While some could let go of the past, others could not. As a result, there was little change. The future was going forward by standing still.

The mid-21st-century stagnation that stalled the evolution of the emerging global village showed up in many areas of society. The anticipation that terrorism would be conquered had not come to pass. Instead, it became confined to the same geographic regions where it had first exploded onto

the stage of history several decades earlier. Thousands lost their lives as suicide bombers made murderous destruction a way of life with no end in sight. The global anti-terrorism offensive that arose in the first decade demonstrated its worth as a successful deterrent—but as containment only and not conquest. Keeping weapons of mass destruction from the grasp of would-be killers who thought nothing of using them on any enemy proved to be the greatest ongoing challenge.

Modern science continued probing ever more deeply into the mysteries of nature. New discoveries led to innovative technologies in health care, home improvements, transportation, entertainment, and many other areas. While fundamentalist groups showed no signs of letting up on promoting their Premodern views, they could only slow down, not reverse, science's forward momentum. Except for a small minority, all of the diverse cultures that came together in the global village searched for ways to combine the best that the Modern world offers with their traditional sacred beliefs without either rejecting the former or abandoning the latter.

The long-term trend toward democracy, which began to stall during the first two decades of the century, came to a standstill by 2050. Majority rule remained robust in nations with deep democratic traditions. Autocrats and semi-autocrats continued to impose their will on subjugated populations and did not hesitate to use force if necessary to maintain control and suppress democratic uprisings.

By mid-century, little had changed in the realm of economics. By now it had become clear that a completely un- or deregulated economy left to its own internal contradictions would eventually put wealth into the hands of fewer and fewer top-echelon elites, widen the gap between the rich and poor, and erode the broad middle class that served as the foundation for social stability. Nor did many societies return to the past by socializing productivity and distribution—a certain pathway to economic stagnation. Whatever the combination, all nations had learned one of history's most important lessons: Not enough government and too much government are equally undesirable choices.

In the search for the ideal balance between politics and economics, some countries gave more leeway to open markets with limited taxation, while others tipped the scale toward higher taxes and support for universal public programs. Even with democracy stagnation, by mid-century one trend had become clear. In developing countries, centralized governments like China could stimulate marketplace expansion as successfully as decentralized democracies like India. Paralleling the previous 100 years of world history, the continuing quest for the right mix of government intervention and economic productivity became the holy grail of the global village.

In the final analysis, going forward by standing still left the citizens of 2050 with one overarching impression: Four centuries of steady social change slowed down to a crawl. For multitudes, the patterns of the past continued to provide psychological assurances that the instabilities of the

rapidly changing global village could not begin to match. The once-feared specter of secularization—the privatizing of religion—became an unexpected blessing for the millions who took comfort in their sacred beliefs. As modernization slowed to a standstill by mid-century, the staying power of Premodern beliefs and behavior surprised even the most diehard secularists.

Scenario 3: Going Forward by Moving Ahead

It is the year 2050 and many changes have occurred since the first decade of the new century. For four decades, the planet has been advancing toward what some call an era of new possibilities. As the century began to unfold, the old anxieties that prevailed during the first two decades had slowly given way to new expectations that had been nurtured by 40 years of constructive change. The collective psychology of fear over an impending Armageddon had given way to a new vision that real progress in advancing toward common goals was being made.

By mid-century, the masses of global citizens had realized that returning to the nostalgic good old days in order to flee from the challenges of the future offered little hope of creating a better world. The only way to fashion a better future was by moving ahead. Nearly everyone agreed that the gradual eradication of terrorism had contributed in no small measure to the upbeat mood. Even though it took nearly half a century, the all-out global effort to stop this scourge had in large measure succeeded. Although some terrorist cells continued to ravage out-of-the-way villages, by and large the majority of people saw this as the last gasp effort of a small and desperate minority.

As the terrorist threat diminished, the long-term trend toward the integration of diverse cultures continued without interruption. For nearly 100 years, the continuing growth of the worldwide communication web and improvements in mass transportation had been stimulating the birth of the global village. By the mid-21st century, the full potential of this ever-expanding technology was being realized at an unprecedented level.

A world culture that combined the best elements of the diverse communities that intermixed in the global village had begun to emerge. The earlier fears that led some groups to close ranks and cut themselves off from threatening outsiders began to soften as repeated contact with “the other” gradually increased their trust levels. With an upswing of tolerance toward cultural diversity, especially within second- and third-generation immigrant families around the world, there emerged a new openness toward cross-cultural dialogue among communities of all kinds.

As a result of this new momentum, a greater number of leaders and laity of the world’s religious and philosophical groups found common cause in emphasizing their shared universal values rather than their worldview differences. This did not diminish their respect for each other’s sacred beliefs.

Rather, it replaced their previous feelings with a deeply felt desire to move ahead into the future with a sense of hope rather than to back up into past with the same old hatreds and hostilities. Bigotry declined. The ongoing separation of religion from state sponsorship gave everyone the assurance that they could freely express their right of conscience. It was as if the endless struggle between good and evil that dwells in the heart of human nature had taken a turn for the better.

Advancements in science and technology, which had been instrumental in creating the Modern world, continued their long-term trend. Enhancements in biogenetics led the way as new discoveries untangled the complexities of the human genome. With extreme caution, scientists were moving ahead in applying this new knowledge to the eradication of debilitating genetic diseases that had been plaguing humanity throughout the long trek of social evolution.

While there was no return to the earlier naïve philosophy of human perfectibility, nonetheless, the promises that science held out at the start of the Modern era to improve human health and happiness in virtually all areas of life had steadily produced results that were both visible and good. As science continued to unravel the secrets of the universe—from the behavior of atoms to the birth of galaxies—advocates of Premodern conceptions of the origin and destiny of creation found it more difficult to defend their ancient views. The vast majority of global village citizens embraced the growing worldwide détente between the search for spiritual faith and the quest for truthful knowledge. The growing compatibility between science and religion had taken root in the global village.

By 2050, global pressures to move ahead politically broke open the early 21st-century logjam that had halted the long-term trend toward democracy. Starting in the 2020s, a resurgent democratic spirit surfaced on the world stage. To everyone's surprise, it picked up momentum even in some of most entrenched autocracies of Africa and Asia. As would be expected, violent dictators reacted with the usual bloody repression in their desperate efforts to cling to power. Some succeeded, but for others it was to no avail.

By mid-century, 10 new democracies had spread around the world and joined the ranks of other democratic nations in the global village. The biggest change of all had been occurring in China, which was slowing inching its way toward the day when it would open the door to the possibility of some form of multiparty politics. The successful rekindling of this long-term global trend brought hope and inspiration to leaders in those remaining countries where dictators could still impose their control over the masses at will. As the global village entered the last half of the 21st century, it seemed as if even these last bastions of autocratic rule would eventually yield to the relentless drive of people everywhere to elect their leaders and determine their own political future.

The most remarkable economic change that occurred by mid-century was the ability of nations everywhere to achieve a finely tuned balance between

the role of government in providing for the social well-being of all citizens without undermining the entrepreneurial motivations necessary to sustain a modern marketplace economy. Government leaders recognized that without a robust private sector their economies would stagnate and few resources would be available for support of public projects of all kinds—from infrastructure improvements to safety-net programs for the needy.

The motto, “no one size fits all,” was the prevailing catchphrase as a growing number of nations with diverse governments that ranged from multiparty to single-party systems found the balance they needed in order to achieve both political stability and economic growth. By mid-century, decades of deep concern for the environment continued unabated as all new political and business initiatives required “green” guarantees that land, water, and air would remain unpolluted. While not all nations were equal in mandating tough standards, pollution levels around the world were in decline.

In the final analysis, going forward by moving ahead left the citizens of 2050 with one overarching impression: The promises of the Modern world were slowly being realized throughout the global village—even if some communities were marching forward faster than others. These uneven results, however, did not dampen the enthusiasm of leaders everywhere to continue moving ahead toward the goal of universal inclusion of all nations regardless of their social, scientific, technological, economic, or political traditions. While no time table or optimal level of attainment was fixed to direct this momentum, nearly everyone agreed that the modernization process, which had already produced vast changes in the emerging global village, would remain the dominant driver of the future.

THE MOST PROBABLE AND PREFERRED FUTURE

This final section will focus on which of the above three scenarios for the future of Truth and Freedom in the global village, or some combination of them, as summarized in Figure 10.2, stands the best chance of becoming the actual future.

The modern approach to studying the future addresses this issue from two perspectives. The first is descriptive, and the second is normative. The above three scenarios are descriptive, which means that they say nothing about which is preferable. However, describing something is not the same thing as desiring it. The normative aspect of futuring involves deciding which one of the scenarios is most preferred and then acting in order to bring it about.

In addition, the relative probability that any one of the three will become the actual future changes constantly because circumstances are always changing. For this reason, some futurists refrain from assigning probabilities to scenarios because this might lead to a false assurance that one of the alternatives, sometimes called the “official future,” is becoming the actual

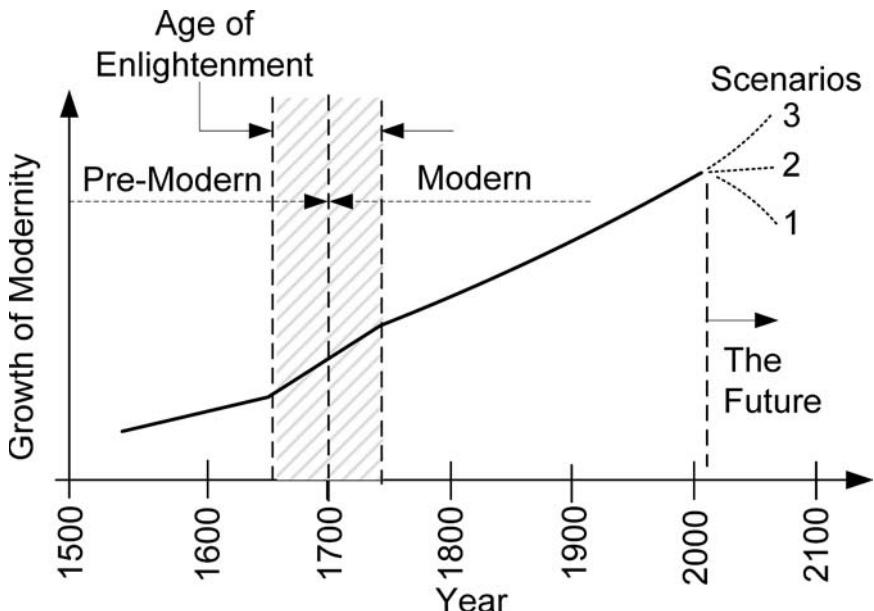


Figure 10.2 Modernity and the Future of Truth and Freedom in the Global Village.

future when it is not. Since any given present is filled with unexpected surprises and dramatic shifts that can alter the course of the future, not fixing probabilities for any of the scenarios means that all of them stand a comparable chance of becoming the actual future. This leaves a futurist open to scanning the environment in search of clues that might tip one of the alternatives in the direction of becoming the actual future.

Furthermore, human choice plays a central role in creating the future. This means that any possible future can be chosen as the preferred future and that those who choose it can take the actions that they believe are required to bring it about. Modern approaches to studying the future do not assume that the future is predetermined and that humans have no control over its direction. Rather, individuals and groups create the future by the choices they make in the present and through the actions that follow from them. That is to say, Freedom of choice is an essential prerequisite for creating the future.

Given the assumption that Freedom and the future are inseparable, only one real question remains: Given the scenarios described above, which one ought to be chosen? The answer to this question ties directly to the topic of Truth. The one that should be intentionally selected is the one that stands the best chance of long-term viability. In other words, among the three possible futures described above, one or some combination of them is the most desired choice because it incorporates the highest degree of

truthfulness about the past and the present, and therefore, by implication, for the future. Once a scenario is chosen as the most preferred, then deliberate actions taken by those who chose it and desire to bring it about will increase the probability that it will come to pass.

Which of the three descriptive scenarios ought to be the normative choice? The answer is Scenario 3, Going Forward by Moving Ahead, but with some elements of the other two scenarios, Going Forward by Backing Up and Going Forward by Standing Still, included. Scenario 3 is the preferred choice because it is based on long-term trends that are grounded in the historical and empirical realities of the past and present. This does not mean that the future is merely a straight-line projection based on these trends. Rather, it means that to the extent that the future rests on past long-term patterns that continue to remain influential in the present, it can be assumed that such patterns will most likely continue into the future.

For example, while there is no guarantee that modernization will remain one of the world's major mega-trends of the future, chances are better than not that it will. Stated simply, the modernization train has left the station. Every culture on every continent has felt its impact and will continue to do so. All future decisions and actions, whether in the form of support or opposition, will be made against the backdrop of this ubiquitous process.

From a strictly empirical perspective, this means that attempts to reverse the forward evolution of modernization by backing up (Scenario 1) into Pre-modernism are the least likely to succeed. While it might be possible to delay the continuing development of modernization by standing still (Scenario 2) in order to achieve a kind of balance or equilibrium between Premodernism and Modernism, the most probable and preferred future is the continuing development of the modernization process along with the multiple and mostly positive changes that it has produced in the Modern world.

These changes have been described throughout this book and can be readily summarized. The development of the global electronic and mass transportation networks that envelop the earth are an outgrowth of modernization, which in large measure is driven by advancements in modern science and technology. Modernization has stimulated the growth of the globalization process that is the driving force behind the creation of the global village, which would not exist without worldwide instantaneous communication.

In turn, globalization has brought together as never before the world's once-isolated cultures and religious traditions. No doubt, this will continue well into the 21st century and beyond. Sooner or later, the growth of pluralism will serve as a platform for the diverse peoples of the global village to begin living in greater harmony. They will not only tolerate—but also appreciate—each other's differences as a positive resource for building a worldwide community, rather than as falsehoods to be abolished.

This means that Scenario 3 or some variation of it will most likely become the actual future. Scenario 2 recognizes that a balance between embracing

or rejecting pluralism is also a strong possibility, because it allows those who choose to protect their traditions as well as those who want to move beyond them to coexist in creative tension. This balance can readily be incorporated into Scenario 3. Scenario 1 is the least likely as well as the least preferred because backing up into the past assumes that it is possible to return to the cultural isolation of the Premodern era—an improbable alternative given the transforming impact and forward momentum of globalization.

A strong correlate to foreseeing Scenario 3 as the most probable, as well as the most preferred, future is the eventual defeat of religiously based terrorism. If there is any single trend that could slow down or even possibly reverse the ongoing development of Modernism, it is this driving force. At core, early 21st-century terrorists are motivated by a Premodern vision of Truth and universal conquest that will enable them to impose their ancient worldviews on others. Their willingness to die a martyr's death in the suicide killings of perceived opponents and innocent people in the belief that they will receive eternal rewards for their heroism is a powerful motivator.

Scenario 1 in which terrorism becomes more widespread is the least preferred of the three. Scenario 2 assumes that terrorism has been contained but not conquered. Scenario 3 presupposes that it has been defeated. As of the first decade of the 21st century, all three scenarios are in competition over which one will emerge by 2050. Over time, Scenario 3 assumes that the world will tire of terrorism and move to abolish it, but there is no guarantee that this will occur. On this issue, the role of human choice, action, and resolve will be major factors in determining which of these alternative pathways the future follows. On the issue of terrorism, in order for the global village to move forward into an era of new possibilities, Scenario 3 ought to be chosen and pursued with no let up until it becomes the actual future.

In addition, Scenario 3 has other preferred advantages as well. The pressure for the global village to become more secularized will probably increase for the following reason. The separation of the secular and the sacred allows maximum Freedom for the members of the world's diverse faiths, philosophical as well as religious, to follow their conscience in accepting the Truth that most deeply satisfies their need for meaning. While not all societies will move in this direction, and no doubt some will resist by continuing their exclusivist religious policies, the trend to allow for greater Freedom of religious expression will continue to grow in the future—especially as more individuals and groups learn to live creatively with pluralism as both Scenarios 2 and 3 envision.

In the political realm, Scenario 3 also holds the lead as the most probable and preferred future. This means that the historic trend toward democracy will continue well into the 21st century and beyond, even though countervailing pressures from autocrats and semi-autocrats have slowed

it down. Most likely, as educational levels increase steadily throughout many of the developing regions of the emerging global village, the pressure to establish democratic procedures for the election of public officials will increase. While there is no guarantee that this will happen, returning to Premodern conditions that foster authoritarian rule as in Scenario 1 or stalling at the current level as in Scenario 2 are less likely to transpire than the alternative of growing pressure to regain momentum in the direction of democracy as described in Scenario 3.

In the sphere of economics, Scenario 3 also has an edge over the other two, although this is less clear than in other areas such as modernization and globalization. The reason for cloudy foresight on this issue lies in the seemingly irresolvable disagreements regarding the extent to which government should be actively involved in the marketplace. While the long-term trend in this area is clear, namely, toward increased government regulation, no consensus exists over the desired amount. For some, the motto is the less the better. For others, it is the more the better. While few dispute that a society benefits the most when it has a robust and productive economy, debate exists over what role government should play in fostering it.

In addition, from a strictly empirical and comparative perspective, both democratic and autocratic governments have demonstrated that they are capable of promoting economic growth through a variety of interventions. There is no single model of the optimal relationship of politics to economics that fits all circumstances. At the same time, trends in other areas, especially politics, can offer foresight into the potential future of economic behavior as well. In the future, the continuing adoption of marketplace approaches to the economy will be coupled with the spread of democracy.

According to Scenario 3, a convergence is occurring between the political and economic sectors of society. The least likely alternative is going into the future by backing up as described in Scenario 1, where the world is divided into the two camps of total state control versus the unregulated marketplace. While there is no guarantee, the most probable and preferred economic trend of the future to the year 2050 will involve the spread of the regulated marketplace under the direction of democratically derived governments.

No doubt, top-down forms of marketplace regulation under the aegis of autocratic or semi-autocratic regimes will continue to exist, while various combinations of democracy and regulated capitalism will continue to expand around the world. Any attempt to forecast whether democratically regulated capitalist systems will ultimately replace all autocratic ones is speculative at best. This means that the pattern of standing still, as described in Scenario 2, will not continue indefinitely but rather will give way to a future in which democratic- and marketplace-driving forces will converge as they continue to spread throughout the global village.

CONCLUSION

What overall conclusions about the future of Truth and Freedom can be drawn from the above discussion of three future scenarios? This question can be answered best by revisiting one of the central premises that appeared at the outset of this book. Human survival has evolved through a process of trial and error. In the challenge to endure in a world not of its own making, humanity has struggled to discover those truthful ideas and social structures that will increase the potential not only for surviving but for prospering. In the midst of humanity's hard-core confrontation with reality, many ways of organizing society have been tried. As history amply demonstrates, some have succeeded while others have failed. Long-term trends tell a twofold story of (1) what works and what does not as well as (2) what works best among the many alternatives that have appeared.

In the long trek of the search for Truth during human evolution, it is clear that:

- Modernism has replaced Premodernism.
- Modern science and technology have transformed the world more than any other force and will most likely continue to do so.
- Global interaction has superseded cultural isolation as electronic communication and mass transportation have blanketed the earth.
- Secularization has increased.
- Multiple religious and philosophical faiths with diverse worldviews intermix and compete against each other as never before, even as their members begin to discover the common moral standards cut across their differences.
- An increasing number of countries have adopted various marketplace approaches to providing for the economic needs of their populations.
- Democracy has progressively replaced autocracy.
- Concern for the environment is growing worldwide.

What role does Freedom play in this process? In terms of the above eight long-term evolutionary trends, advancements in modern science have demonstrated through the principle of indeterminacy that Freedom is built into the physical structures of nature and of thought. Globalization and its associated worldwide communication network have heightened an awareness of pluralism where recognition of the right to Freedom of conscience is an essential aspect of living in the Modern period. Separating the sacred from the secular removes from the state the power to impose uniform religious beliefs on all citizens, leaving them Free to find their own meaning amidst the myriad of competing Truth claims.

Freedom is one of the essential principles of democracy and the modern economy. Marketplace activity is impossible unless individuals are Free to pursue their entrepreneurial interests, provided that this does not lead to depriving others of theirs. Without the Freedom to vote government

officials in and out of public office, democracy would cease to exist. The expansion of democracy during the past 200 years is the story of the desire for and the growth of greater Freedom around the world. Finally, as citizens throughout the global village move to protect the environment and keep it Free from the harmful effects of pollution, all of the Freedoms that are connected to the other long-term driving forces discussed in this chapter and throughout this book as a whole can be sustained and expanded well into the future.

In other words, the need for Freedom is as great now as ever in human history because it is inseparable from the expansion of modernization and its benefits: support for scientific discoveries and constructive technical spin offs; the growth of globalization, secularization, and creative pluralism; an increase in entrepreneurial initiatives; and the spread of democracy around the world. The communities that preserve and expand the boundaries of Freedom in all these areas are the ones that stand the best chance of not only surviving but of thriving throughout the remainder of the 21st century and beyond as the global village continues to grow.

And that is the Truth of it.

NOTES

1. There exist many excellent sources for defining how modern futurists systematically approach the study of the future to develop foresight skills. Few, if any, believe that the future can be known by merely projecting current trends onto some impending point in time. Essentially, futurists envision multiple possibilities by identifying the main driving forces in the present that will shape the future and by combining them in imaginative ways. In order to cultivate the capacity for foresight, futurists use several methods that range from highly sophisticated computer models to single-person visions of alternative scenarios. See Edward Cornish, *Futuring: The Exploration of the Future* (Bethesda, Md.: World Future Society, 2004); Wendell Bell, *Foundation of Futures Studies: Human Science for a New Era*, 2 vols. (New Brunswick, N.J.: Transaction Publishers, 1997); Nicholas Rescher, *The Future: An Introduction to the Theory of Forecasting* (Albany, N.Y.: State University of New York Press, 1998); John L. Petersen, *Out of the Blue: Wild Cards and Other Big Future Surprises* (Arlington, Va.: A Danielle LaPorte Book, 2000); Bertrand de Jouvenel, *The Art of Conjecture* (New York: Basic Books, 1967); and Fred L. Polak, *The Image of the Future*, trans. Elise Boulding (New York: Elsevier, 1973).

2. See Peter Schwartz, *The Art of the Long View* (New York: Doubleday, 1991).

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